

7/6/04

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FILE 'HOME' ENTERED AT 09:43:51 ON 06 JUL 2004

=> file registry
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE ENTRY	TOTAL SESSION
0.21	0.21

7/6/04

FILE 'REGISTRY' ENTERED AT 09:43:59 ON 06 JUL 2004
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STRUCTURE FILE UPDATES: 5 JUL 2004 HIGHEST RN 704870-92-8
DICTIONARY FILE UPDATES: 5 JUL 2004 HIGHEST RN 704870-92-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

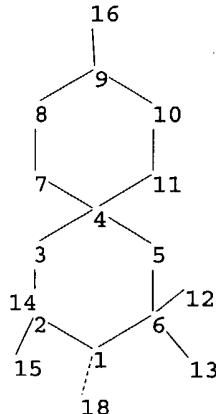
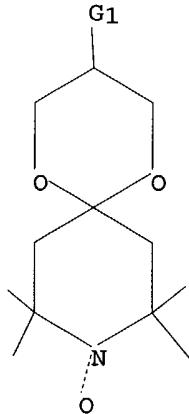
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<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>
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chain nodes :

12 13 14 15 16 18

ring nodes :

1 2 3 4 5 6 7 8 9 10 11

chain bonds :

1-18 2-14 2-15 6-12 6-13 9-16

ring bonds :

1-2 1-6 2-3 3-4 4-5 4-7 4-11 5-6 7-8 8-9 9-10 10-11

exact/norm bonds :

1-2 1-6 1-18 2-3 3-4 4-5 4-7 4-11 5-6 7-8 8-9 9-10 9-16 10-11

exact bonds :

2-14 2-15 6-12 6-13

G1:H,CH3,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu,Ak

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 18:CLASS

09/844986

7/6/04

L1 STRUCTURE UPLOADED

=> s 11
SAMPLE SEARCH INITIATED 09:44:19 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 44 TO ITERATE

100.0% PROCESSED 44 ITERATIONS 44 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 483 TO 1277
PROJECTED ANSWERS: 483 TO 1277

L2 44 SEA SSS SAM L1

=> s 11 ful
FULL SEARCH INITIATED 09:44:24 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 884 TO ITERATE

100.0% PROCESSED 884 ITERATIONS 859 ANSWERS
SEARCH TIME: 00.00.01

L3 859 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 155.42 155.63

FILE 'CAPLUS' ENTERED AT 09:44:28 ON 06 JUL 2004
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FILE COVERS 1907 - 6 Jul 2004 VOL 141 ISS 2
FILE LAST UPDATED: 5 Jul 2004 (20040705/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13
L4 182 L3

09/844986

7/6/04

=> file registry
COST IN U.S. DOLLARS
FULL ESTIMATED COST

SINCE FILE ENTRY	TOTAL SESSION
1.38	157.01

FILE 'REGISTRY' ENTERED AT 09:46:20 ON 06 JUL 2004
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STRUCTURE FILE UPDATES: 5 JUL 2004 HIGHEST RN 704870-92-8
DICTIONARY FILE UPDATES: 5 JUL 2004 HIGHEST RN 704870-92-8

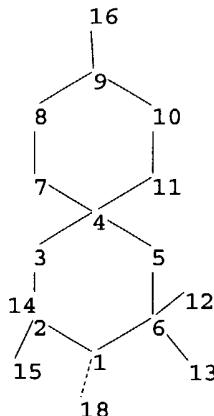
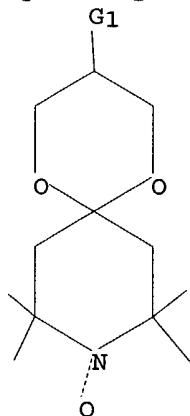
TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>
Uploading C:\Stnexp4 corrupted\QUERIES\09844986.str



chain nodes :
12 13 14 15 16 18

ring nodes :

1 2 3 4 5 6 7 8 9 10 11

chain bonds :

1-18 2-14 2-15 6-12 6-13 9-16

ring bonds :

1-2 1-6 2-3 3-4 4-5 4-7 4-11 5-6 7-8 8-9 9-10 10-11

exact/norm bonds :

1-2 1-6 1-18 2-3 3-4 4-5 4-7 4-11 5-6 7-8 8-9 9-10 9-16 10-11

exact bonds :

2-14 2-15 6-12 6-13

09/844986

7/6/04

G1: H, CH3, Et, n-Pr, i-Pr, n-Bu, i-Bu, s-Bu, t-Bu, Ak

Match level :

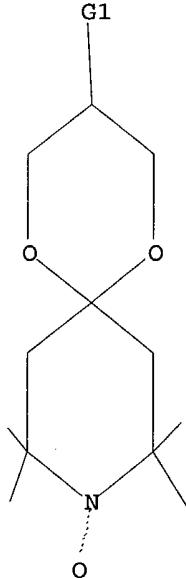
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 18:CLASS

L5 STRUCTURE UPLOADED

=> d 15

L5 HAS NO ANSWERS

L5 STR



G1 H, Me, Et, n-Pr, i-Pr, n-Bu, i-Bu, s-Bu, t-Bu

Structure attributes must be viewed using STN Express query preparation.

=> s 15

SAMPLE SEARCH INITIATED 09:46:43 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 16 TO ITERATE

100.0% PROCESSED 16 ITERATIONS
SEARCH TIME: 00.00.01

13 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 80 TO 560
PROJECTED ANSWERS: 44 TO 476

L6 13 SEA SSS SAM L5

=> s 15 ful
FULL SEARCH INITIATED 09:46:47 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 341 TO ITERATE

09/844986

7/6/04

100.0% PROCESSED 341 ITERATIONS
SEARCH TIME: 00.00.01

187 ANSWERS

L7 187 SEA SSS FUL L5

=> file caplus
COST IN U.S. DOLLARS
FULL ESTIMATED COST

SINCE FILE ENTRY	TOTAL SESSION
155.42	312.43

FILE 'CAPLUS' ENTERED AT 09:46:52 ON 06 JUL 2004
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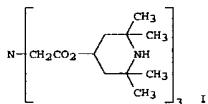
FILE COVERS 1907 - 6 Jul 2004 VOL 141 ISS 2
FILE LAST UPDATED: 5 Jul 2004 (20040705/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 17
L8 47 L7

=> d abs bib hitstr 40-47

09/844986



AB Stabilizers for vinyl polymers, polyamides, and polyesters contained triphosphites 10-69.5, acid phosphites or their metal salts 0.5-10, and 2,2,6,6-tetramethyl-4-piperidyl carboxylic esters 30-89.5%. Thus, a film prepared from PVC [9002-86-2] 100, DOP 50, Ca stearate 1.0, Zn stearate 0.1, I [64022-57-7] 0.7, tetra(tridecyl) 4,4'-butylenedibis[3-methyl-6-tert-butylphenol] diprophosphate [13003-12-8] 1.2, and diphenyl hydrogen phosphite Zn salt [64022-68-0] 0.1 part failed after 940 h in a Weather-Ometer and after 120 min in a forced air oven at 175°, compared with 280 and 45, resp., for a control.

AN 1979:153036 CAPLUS

DN 90:153036

TI Stabilizers for synthetic polymers comprising 2,2,6,6-tetramethyl-4-piperidyl carboxylic acid ester, a triphosphite, and an acid phosphite or salt

IN Minagawa, Motonobu; Kubota, Naohiro; Shibata, Toshihiro

PA Argus Chemical Corp., USA

SO U.S., 34 pp.

CODEN: USXXAM

DT Patent

LA English

PAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4110306	A	19780829	US 1976-744053	19761122
JP 52066551	A2	19770602	JP 1975-144357	19751201
JP 53038170	B4	19781013		

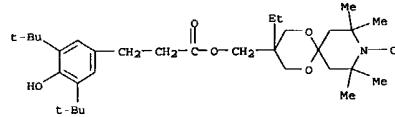
PRAI JP 1975-144357 19751201

IT 64022-53-3 64022-58-8 64022-59-9

RL: PEP (Physical, engineering or chemical process); PROC (Process) (heat and light stabilizers, for polymers)

RN 64022-53-3 CAPLUS

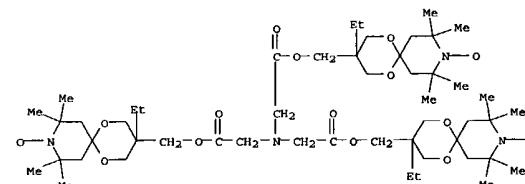
CN 1,5-Dioxa-9-azapiro[5.5]undec-9-yloxy, 3,3'-(nitrilotriis[(1-oxo-2,1-ethanediyl)oxymethylene])tris[3-ethyl-8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)



RN 64022-58-8 CAPLUS

CN 1,5-Dioxa-9-azapiro[5.5]undec-9-yloxy, 3,3',3''-(nitrilotriis[(1-oxo-2,1-ethanediyl)oxymethylene])tris[3-ethyl-8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A

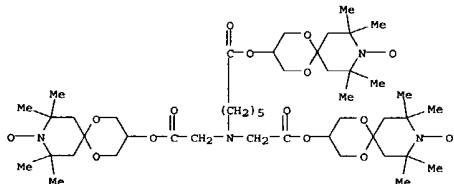


PAGE 1-B

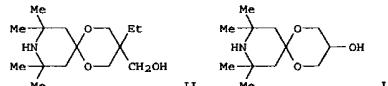
—O

RN 64022-59-9 CAPLUS

CN 1,5-Dioxa-9-azapiro[5.5]undec-9-yloxy, 3,3'-([(6-oxo-6-[(8,8,10,10-tetramethyl-9-oxy-1,5-dioxa-9-azapiro[5.5]undec-3-yloxy)hexyl]imino)bis[(1-oxo-2,1-ethanediyl)oxy]]bis[8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)



GI



AB Ester (15) of 1,1,3,3-tetracarboxypropane, 1,2,3,4-tetracarboxybutane, tetracarboxyethene, 1,1,2,3-tetracarboxypropane, or 1,1,3,3-tetrakis(2-carboxyethyl)-2-cyclohexanol with 5-piperidinol derivative, e.g., 2,2,6,6-tetramethylpiperidin-4-ol (I) [2403-86-5], compound II [53463-86-8], or compound III, are useful as stabilizers for polymers. Amine oxides (7) of these esters are also useful as stabilizers. Thus, tetra-Me 1,1,3,3-propanetetracarboxylate [28781-92-2] and I were used to prepare [(R02C)2CH]2CH2 (R = 2,2,6,6-tetramethylpiperidin-4-yl) (IV) [64022-63-5]. Plasticized PVC [9002-86-2] containing 0.1 phr IV was

stable for 420 h in UV light, compared with 310 h with 2,2,6,6-tetramethylpiperidin-4-yl benzoate.

AN 1979:138645 CAPLUS

DN 90:138645

TI 2,2,6,6-Tetramethyl-4-piperidyl esters of aliphatic tetracarboxylic acids as stabilizers for synthetic polymers

IN Minagawa, Motonobu; Kubota, Naohiro; Shibata, Toshihiro

PA Argus Chemical Corp., USA

SO U.S., 31 pp.

CODEN: USXXAM

DT Patent

LA English

PAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4136081	A	19790123	US 1976-736288	19761028
JP 52063103	A2	19770525	JP 1975-139086	19751119
JP 56005431	B4	19810204		

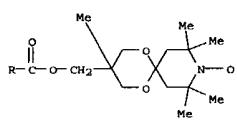
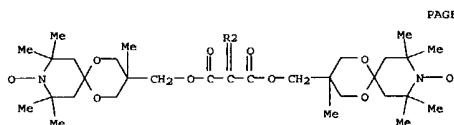
PRAI JP 1975-139086 19751119

IT 66569-17-3 66569-21-9 69851-59-8

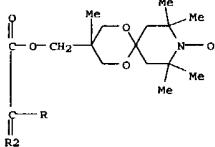
RL: PEP (Physical, engineering or chemical process); PROC (Process) (light stabilizers, for polymers)

RN 66569-17-3 CAPLUS

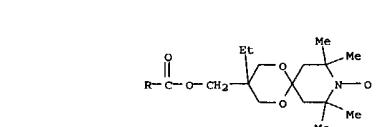
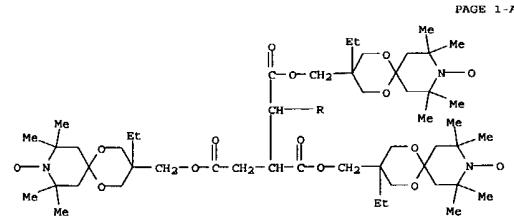
CN 1,5-Dioxa-9-azapiro[5.5]undec-9-yloxy, 3,3'-([(1,4-dioxo-2,3-bis[(3,8,8,10,10-pentamethyl-9-oxy-1,5-dioxa-9-azapiro[5.5]undec-3-yloxy)carbonyl]2-butene-1,4-diyl)bis(oxymethylene)])bis[3,8,8,10,10-pentamethyl- (9CI) (CA INDEX NAME)



PAGE 2-A

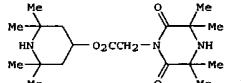
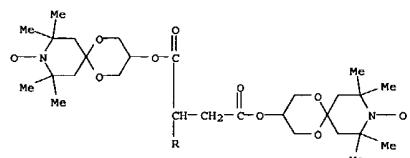
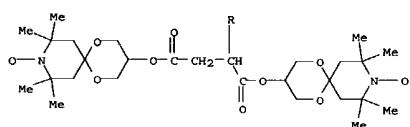


RN 66569-21-9 CAPLUS
 CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3'-(1,4-dioxo-2,3-bis[2-oxo-2-[(8,10,10-tetramethyl-9-oxo-1,5-dioxa-9-azaspiro[5.5]undec-3-yl)methoxy]carbonyl]-1,5-dioxa-1,5-pentanediyil)bis(oxymethylene)bis[3-ethyl-8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)



PAGE 2-A

RN 69851-59-8 CAPLUS
 CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3'-(1,4-dioxo-2,3-bis[2-oxo-2-[(8,10,10-tetramethyl-9-oxo-1,5-dioxa-9-azaspiro[5.5]undec-3-yl)oxyethyl]-1,4-butanediyil)bis(oxy)bis[8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)



AB The title compds. are prepared as light stabilizers for polymers. Thus, the piperazine compound (I) [68860-15-1] was prepared from 3,3,5,5-tetramethyl-2,6-diketopiperazine [38527-75-2], ClCH₂CO₂Me [96-34-4], and 4-hydroxy-2,2,6,6-tetramethylpiperidine [2403-88-5] using conventional procedures. A PVC [9002-86-2] composition containing 0.1 part I was stable for 600 h before failure during weathering testing and UV exposure, in comparison to 380 h for a control containing a conventional light stabilizer.

AN 1979-55758 CAPLUS
 DN 90:55758
 TI 2,2,6,6-Tetrasubstituted-4-piperidyl carboxy heterocyclic compounds as stabilizers for synthetic polymers

IN Minagawa, Motonobu; Kubota, Naohiro; Shibata, Toshihiro

PA Argus Chemical Corp., USA

SO U.S., 18 pp.

CODEN: USXXAM

DT Patent

LA English

PAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI US 4118369 A 19781003 US 1976-709561 19760728

US 31261 S 1980531 US 1981-325392 19811127

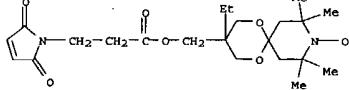
DRAI US 1976-709561 19760728

IT 68860-00-4

RL: PEP (Physical, engineering or chemical process); PROC (Process) (light stabilizers, for polymers)

RN 68860-00-4 CAPLUS

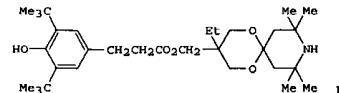
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3-[(3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxopropoxy)methyl]-3-ethyl-8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)



7/6/04

L8 ANSWER 42 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN

(Continued)

L8 ANSWER 43 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN
GI

AB Mixts. of 4-(C15-75-acyloxy)-2,2,6,6-tetramethylpiperidines and carbonates of polyhydric phenols (mol. weight 400-4000) are heat and light stabilizers for plastics. Thus, PVC [9002-86-2] containing DOP 50, Ce stearate 1.0, Zn

stearate 0.1, piperidine ester I [66558-61-0] 0.5, and 4,4'-butyliidenebis[2-tert-butyl-5-methylphenol] carbonate (2:1) (II) [66558-58-5] 1.0 part has Weatherometer resistance 680 h and heat resistance (175°) 90 min, compared with 530 and 60, resp., in the absence of II, 290 and 60, resp., in the absence of I, and 270 and 45, resp., in the absence of I and II.

AN 1978:407104 CAPLUS

DN 89:7104

TI Stabilizers for synthetic resins, containing piperidine derivatives

PA Societe Anon. Argus Chemical N. V., Belg.

SO Belg., 35 pp.

CODEN: BEXXAL

DT Patent

LA French

PAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI BE 85444 A1 19771110 BE 1977-177425 19770510

PRAI BE 1977-177425 19770510

IT 64022-58-8 64022-59-9

RL: USES (Used)

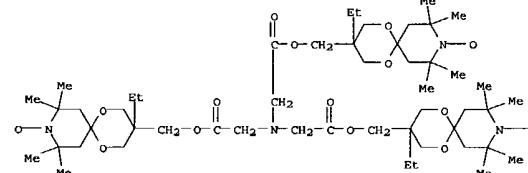
(heat- and light stabilizers, for plastics)

RN 64022-58-8 CAPLUS

CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3',3''-[nitrilotri((1-oxo-2,1-ethanediyl)oxymethylene)]tris[3-ethyl-8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)

L8 ANSWER 43 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B

L8 ANSWER 44 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN

AB Esters of 2,2,6,6-tetramethyl-4-piperidinol (I) or 8,8,10,10-tetramethyl-1,5-dioxa-9-azaspiro[5.5]undecane-3-methanol derivs. with (cyclo)aliphatic tetracarboxylic acids are stabilizers for organic polymers. Thus, stirring

1.66 g tetra-Me 1,3,3-propanetetracarboxylate, 3.74 g I, 0.5 mL 28% NaOMe, and 30 mL xylene 5 h at 142° with MeOH distillation gives a tetraester [64022-63-5]. Plasticized PVC [9002-86-2] containing 0.1 phr

this ester has Weatherometer resistance 420 h, compared to 310 h in the presence of I benzoate.

AN 1978:192137 CAPLUS

DN 88:192137

TI 2,2,6,6-Tetramethyl-4-ol piperidine tetracarboxylic acid esters

PA Societe Anon. Argus Chemical N. V., Belg.

SO Belg., 19 pp.

CODEN: BEXXAL

DT Patent

LA French

PAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI BE 855350 A1 19771205 BE 1977-178156 19770603

PRAI BE 1977-178156 19770603

IT 66569-14-0 66569-17-3 66569-21-9

66569-23-1

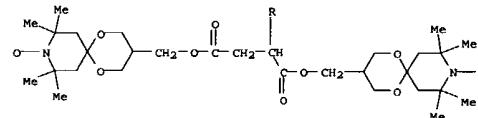
RL: USES (Used)

(light stabilizers, for plastics)

RN 66569-14-0 CAPLUS

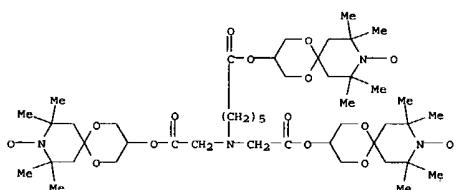
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3'-{[(1,6-dioxa-3,4-bis[(8,8,10,10-tetramethyl-9-oxy-5-dioxa-9-azaspiro[5.5]undec-3-yloxy]carbonyl)-1,6-hexanediyyl]bis(oxymethylene)]bis[8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



—o

RN 64022-59-9 CAPLUS
1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3'-{[(6-oxo-6-[(8,8,10,10-tetramethyl-9-oxy-5-dioxa-9-azaspiro[5.5]undec-3-yloxy]hexyl)imino]bis[(1-oxo-2,1-ethanediyl)oxy]bis[8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)

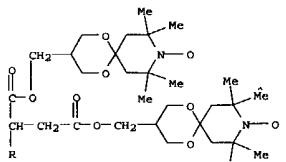


09/844986

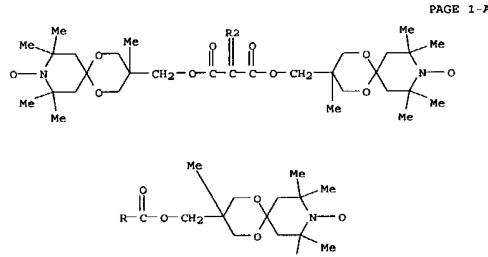
7/6/04

LB ANSWER 44 OF 47 CAPIUS COPYRIGHT 2004 ACS on STN (Continued)

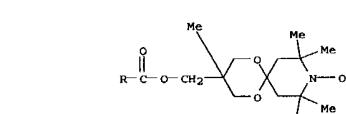
PAGE 2-A



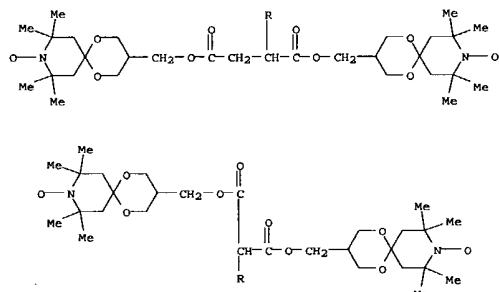
RN 66569-17-3 CAPIUS
 CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3'-[{1,4-dioxo-2,3-bis[(3,8,8,10,10-pentamethyl-9-oxo-1,5-dioxa-9-azaspiro[5.5]undec-3-yl)methoxy]carbonyl}-2-butene-1,4-diy]bis(oxymethylene)bis[3,8,8,10,10-pentamethyl- (9CI) (CA INDEX NAME)



PAGE 1-A

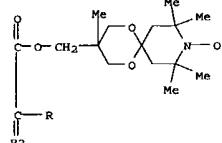


LB ANSWER 44 OF 47 CAPIUS COPYRIGHT 2004 ACS on STN (Continued)
 GI 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy-1,5-pentanediyllbis(oxymethylene)bis[8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)

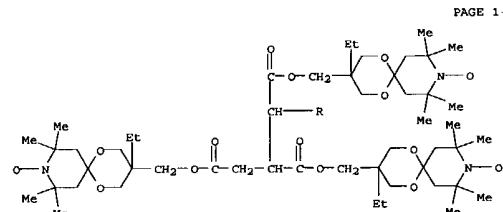


LB ANSWER 44 OF 47 CAPIUS COPYRIGHT 2004 ACS on STN (Continued)

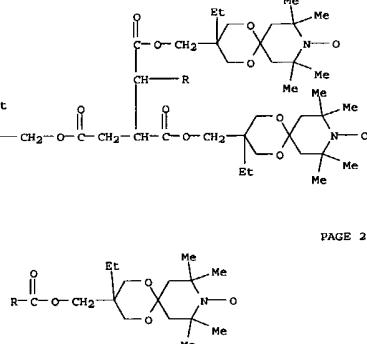
PAGE 2-A



RN 66569-21-9 CAPIUS
 CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3'-[{2,2-bis[(3-ethyl-8,8,10,10-tetramethyl-9-oxo-1,5-dioxa-9-azaspiro[5.5]undec-3-yl)methoxy]carbonyl}-2-butene-1,4-diy]bis(oxymethylene)bis[3-ethyl-8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)



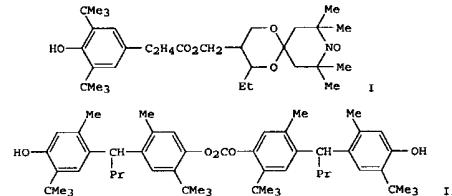
PAGE 1-A



PAGE 2-A

RN 66569-23-1 CAPIUS
 CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3'-[{[1,5-dioxo-2,3-bis[(8,8,10,10-tetramethyl-9-oxo-1,5-dioxa-9-azaspiro[5.5]undec-3-yl)methoxy]carbonyl}-2-butene-1,4-diy]bis(oxymethylene)bis[3-ethyl-8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)

LB ANSWER 45 OF 47 CAPIUS COPYRIGHT 2004 ACS on STN
 GI



AB A thermoplastic resin is mixed with 0.01-5 phr of a piperidine compound and 0.001-5 phr of a carbonate oligomer to give a heat- and light-resistant thermoplastic resin. Thus, a mixture of PVC (6002-86-2) 100, dioctyl phthalate 50, Ca stearate 1.0, Zn stearate 0.1, piperidine compound I [64022-53-3] 0.5, and carbonate oligomer II [62605-81-6] 1.0 part was kneaded to give a 1-mm sheet with light resistance (weatherometer)

680 h and heat resistance (175°) 90 min, compared with 270 h and 45 min, resp., for PVC alone.

AN 1978:74918 CAPIUS

DN 88:74918

TI Heat- and light-resistant thermoplastic resins

IN Minagawa, Yoshinobu; Kubota, Naohiro; Shibata, Toshihiro

PA Adeka Argus Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DP

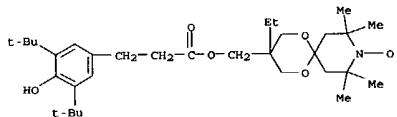
LA Japanese

FAN.CNT 1

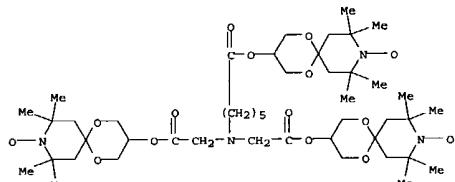
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 52100543	A2	19770823	JP 1976-16793	19760218
JP 55035055	B4	19800911		
US 4124564	A	19781107	US 1977-769890	19770218
PRAI JP 1976-16793		19760218		
IT 64022-53-3 64022-59-9				
RL: USES (Uses)				
(heat and light stabilizers, with phenol oligocarbonates, for PVC)				
RN 64022-53-3 CAPIUS				
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy,				
3-[{3-[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]methyl}-3-ethyl-8,8,10,10-tetramethyl-				
(9CI) (CA INDEX NAME)				

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L8 ANSWER 45 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 64022-59-9 CAPLUS
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3'-{[(6-oxo-6-[(8,8,10,10-tetramethyl-9-oxy-1,5-dioxa-9-azaspiro[5.5]undec-3-yl)oxy]hexyl)amino]bis[(1-oxo-2,1-ethanediyl)oxy]bis[8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)]

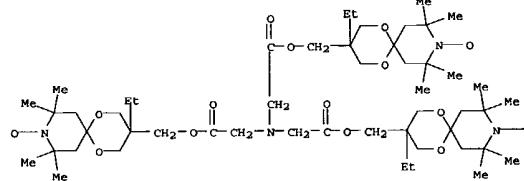


IT 64022-58-8
RL: USES (Uses)
(heat and light stabilizers, with phenol oligocarbonates, for polyethylene)

RN 64022-58-8 CAPLUS
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3',3'''-{nitrilotriis[(1-oxo-2,1-ethanediyl)oxymethylene]}tris[3-ethyl-8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)]

L8 ANSWER 45 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B



L8 ANSWER 46 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

AB Thermoplastic compns. with improved resistance to heat, light, and oxidation contained piperidine derive., phosphite triesters, and phosphite diesters. For example, a PVC [9002-86-2] composition containing DOP 50, Ca stearate 1.0, Zn stearate 1, 2, 2, 6, 6-tetramethyl-4-piperidyl benzoate (I) [26275-88-7] 0.7, tri(nonylphenyl) phosphite (II) [26523-78-4] 1.2, and bis(nonylphenyl) H phosphite [26569-08-4] 0.1 phr had light resistance (weatherometer) 860 h and heat resistance (175°, air oven) 105 h, compared with 280 h and 45 min, resp., for control not containing I, II, and III.

AN 1977:518775 CAPLUS
DN 87:118775
TI Stabilized thermoplastic compositions
IN Minagawa, Tomonobu; Kubota, Naohiro; Shibata, Toshihiro
PA Adeka Argus Chemical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 13 pp.

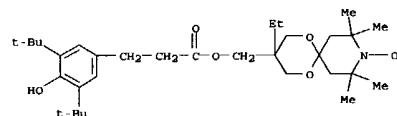
CODEN: JKXXAF

DT Patent
LA Japanese

PAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 52066551	A2	1970602	JP 1975-144357	19751201
JP 53038170	B4	19781013		
US 4110306	A	19780829	US 1976-744053	19761122

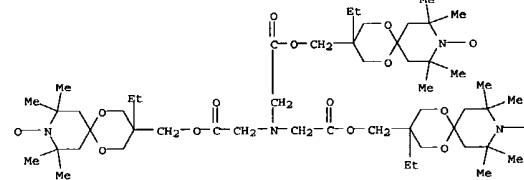
PRAI JP 1975-144357 19751201
IT 64022-53-3 64022-58-8 64022-59-9
RL: USES (Uses)
(stabilizers containing, for thermoplastics)
RN 64022-53-3 CAPLUS
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3'-{[(6-oxo-6-[(8,8,10,10-tetramethyl-9-oxy-1,5-dioxa-9-azaspiro[5.5]undec-3-yl)oxy]hexyl)amino]bis[(1-oxo-2,1-ethanediyl)oxy]bis[8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)]



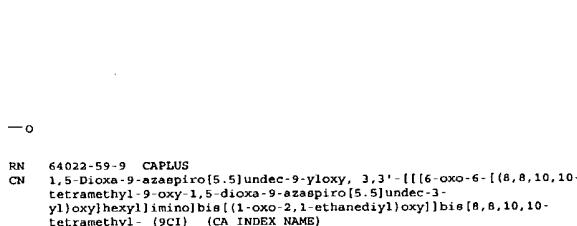
RN 64022-58-8 CAPLUS
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3',3'''-{nitrilotriis[(1-oxo-2,1-ethanediyl)oxymethylene]}tris[3-ethyl-8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)]

L8 ANSWER 46 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-A

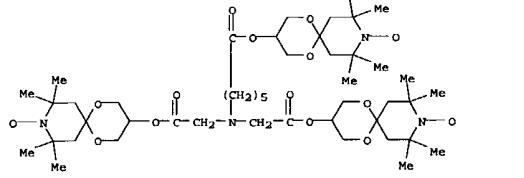


PAGE 1-B



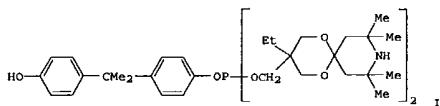
RN 64022-59-9 CAPLUS

CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3'-{[(6-oxo-6-[(8,8,10,10-tetramethyl-9-oxy-1,5-dioxa-9-azaspiro[5.5]undec-3-yl)oxy]hexyl)amino]bis[(1-oxo-2,1-ethanediyl)oxy]bis[8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)]



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L8 ANSWER 47 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN
GI



AB A light-resistant resin composition is prepared, containing a P compound. Thus, a mixture of PVC [9002-86-2] 100, dioctyl phthalate 48, epoxidized soybean oil 2.0, Cs stearate 1.0, Zn stearate 0.1, and phosphite compound (I) [62940-76-5] 0.1 parts was kneaded to give a 1-mm sheet with improved light resistance compared with a control when 2,2,6,6-tetramethylpiperidyl-4-benzoate

was

used instead of I under the same conditions.

AN 1977:424193 CAPLUS

DN 87:24193

TI Light-resistant thermoplastic resin compositions

IN Minagawa, Motonobu; Kubota, Naohiro; Shibata, Toshihiro; Sugibuchi, Kazuo

PA Adeka Argus Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

PAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 52022578	A2	19770219	JP 1975-99291	19750815
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	JP 55047074	B4	19801127		
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PRAI	JP 1975-99291			19750815	
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IT	62940-80-1				
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RL: USES (Uses)

(light stabilizers, for thermoplastic compns.)

RN	62940-80-1	CAPLUS			
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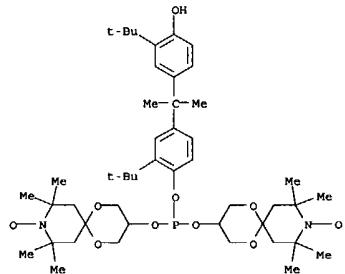
CN	1,5-Dioxa-9-azapiro[5.5]undec-9-yloxy,				
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3,3'·{[[2-(1,1-dimethylethyl)-4-(1-					
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[3-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-methylethylphenoxy]phosphiniden

e]bis(oxy)bis[8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)

L8 ANSWER 47 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



09/844986

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=> file uspatall
COST IN U.S. DOLLARS
          SINCE FILE      TOTAL
          ENTRY        SESSION
FULL ESTIMATED COST          43.20      355.63

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)      SINCE FILE      TOTAL
                                                ENTRY        SESSION
CA SUBSCRIBER PRICE          -5.88      -5.88
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CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 09:50:59 ON 06 JUL 2004
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

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(FILE 'HOME' ENTERED AT 09:43:51 ON 06 JUL 2004)

FILE 'REGISTRY' ENTERED AT 09:43:59 ON 06 JUL 2004

L1 STRUCTURE uploaded
L2 44 S L1
L3 859 S L1 FUL

FILE 'CAPLUS' ENTERED AT 09:44:28 ON 06 JUL 2004

L4 182 S L3

FILE 'REGISTRY' ENTERED AT 09:46:20 ON 06 JUL 2004

L5 STRUCTURE uploaded
L6 13 S L5
L7 187 S L5 FUL

FILE 'CAPLUS' ENTERED AT 09:46:52 ON 06 JUL 2004

L8 47 S L7

FILE 'USPATFULL, USPAT2' ENTERED AT 09:50:59 ON 06 JUL 2004

=> s 17
L9 21 L7

=> d abs bib hitstr 1-21

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L9 ANSWER 1 OF 21 USPATFULL on STN

AB The present invention relates to selected 1-alkoxy-2,2,6,6 tetramethyl piperidine, 1-alkoxy-2,2 diethyl-6,6 dimethyl piperidine and 1-alkoxy-2,6 diethyl-2,3,6 dimethyl piperidine derivatives which are substituted in the 4 position by two oxygen atoms forming an open chain or cyclic ketal structure, a polymerizable composition comprising a) at least one ethylenically unsaturated monomer and b) said piperidine derivatives. Further aspects of the present invention are a process for polymerizing ethylenically unsaturated monomers, and the use of 1-alkoxy-2,2,6,6 tetramethyl piperidine, 1-alkoxy-2,2 diethyl-6,6 dimethyl piperidine and 1-alkoxy-2,6 diethyl-2,3,6 dimethyl piperidine derivatives which are substituted in the 4 position by two oxygen atoms forming an open chain or cyclic ketal structure for controlled polymerization. The intermediate N-oxyl derivatives, a composition of the N-oxyl derivatives with ethylenically unsaturated monomers and a free radical initiator, as well as a process for polymerization are also subjects of the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 2004108340 USPATFULL

TI N-alkoxy-4,4-dioxy-polyalkyl-piperidine compounds, their corresponding N-oxides and controlled radical polymerization therewith

IN Neavada, Peter, Marly, SWITZERLAND
Zink, Marie-Odile, Mulhouse, FRANCE

Wunderlich, Wiebke, Bologna, GERMANY, FEDERAL REPUBLIC OF

PI US 2004082742 A1 20040429

AI US 2003-450229 A1 20030611 (10)

WO 2001-EPI3072 20011112

PRA1 EP 2000-8111908 20001214

DT Utility

FS APPLICATION

LREP CIBA SPECIALTY CHEMICALS CORPORATION, PATENT DEPARTMENT, 540 WHITE

PLAINS RD, P O BOX 2005, TARRYTOWN, NY, 10591-9005

CLMN Number of Claims: 23

ECL Exemplary Claims: 1

DRWN No Drawings

LN.CNT 2259

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 437745-78-3 437745-86-3 437745-90-9

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437746-34-6 437746-38-8 437746-41-3

437747-77-8 437747-81-4 437747-84-7

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437748-00-0 437748-03-3 437748-06-6

437748-09-9 437748-12-4 437748-15-7

437748-18-0 437748-21-5 437748-24-8

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L9 ANSWER 1 OF 21 USPATFULL on STN (Continued)

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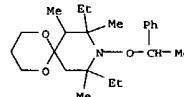
437751-17-2 437751-19-4 437751-21-6

437751-23-0 437751-25-2

(N-alkoxy-4,4-dioxy-polyalkyl-piperidines, their N-oxides and controlled radical polymers therewith)

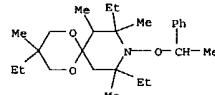
RN 437745-78-3 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3,8,10-triethyl-7,8,10-trimethyl-9-(1-phenylethoxy)- (9CI) (CA INDEX NAME)



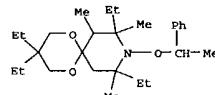
RN 437745-86-3 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3,8,10-triethyl-7,8,10-tetramethyl-9-(1-phenylethoxy)- (9CI) (CA INDEX NAME)



RN 437745-90-9 USPATFULL

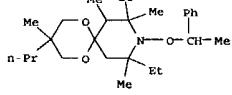
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3,8,10-triethyl-7,8,10-trimethyl-9-(1-phenylethoxy)- (9CI) (CA INDEX NAME)



RN 437745-94-3 USPATFULL

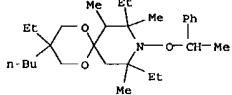
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 8,10-diethyl-3,7,8,10-tetramethyl-9-(1-phenylethoxy)-3-propyl- (9CI) (CA INDEX NAME)

L9 ANSWER 1 OF 21 USPATFULL on STN (Continued)



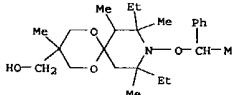
RN 437745-98-7 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3-butyl-3,8,10-triethyl-7,8,10-trimethyl-9-(1-phenylethoxy)- (9CI) (CA INDEX NAME)



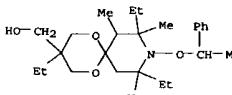
RN 437746-06-0 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undecane-3-methanol, 8,10-diethyl-3,7,8,10-tetramethyl-9-(1-phenylethoxy)- (9CI) (CA INDEX NAME)



RN 437746-10-6 USPATFULL

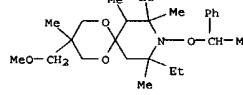
CN 1,5-Dioxa-9-azaspiro[5.5]undecane-3-methanol, 3,8,10-triethyl-7,8,10-trimethyl-9-(1-phenylethoxy)- (9CI) (CA INDEX NAME)



RN 437746-14-0 USPATFULL

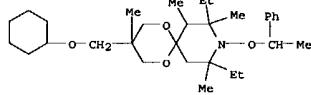
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 8,10-diethyl-3-(methoxymethyl)-3,7,8,10-tetramethyl-9-(1-phenylethoxy)- (9CI) (CA INDEX NAME)

L9 ANSWER 1 OF 21 USPATFULL on STN (Continued)



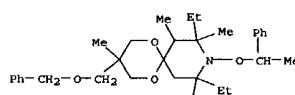
RN 437746-18-4 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3-(cyclohexyloxy)methyl-8,10-diethyl-3,7,8,10-tetramethyl-9-(1-phenylethoxy)- (9CI) (CA INDEX NAME)



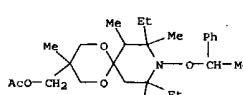
RN 437746-22-0 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 8,10-diethyl-3,7,8,10-tetramethyl-9-(1-phenylethoxy)-3-(phenylmethoxy)methyl- (9CI) (CA INDEX NAME)



RN 437746-26-4 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undecane-3-methanol, 8,10-diethyl-3,7,8,10-tetramethyl-9-(1-phenylethoxy)-, acetate (ester) (9CI) (CA INDEX NAME)



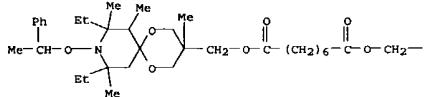
RN 437746-30-0 USPATFULL

CN Octanedioic acid, bis[(8,10-diethyl-3,7,8,10-tetramethyl-9-(1-phenylethoxy)-1,5-dioxa-9-azaspiro[5.5]undec-3-yl)methyl] ester (9CI) (CA INDEX NAME)

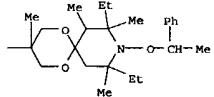
7/6/04

L9 ANSWER 1 OF 21 USPATFULL on STN (Continued)

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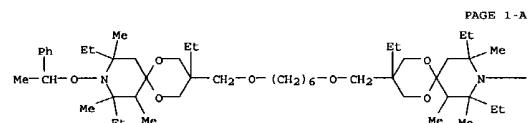


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RN 437746-34-4 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane,
3,3'-[1,6-hexamethoxyethoxy]b
is[3,8,10-triethyl-7,8,10-trimethyl-9-(1-phenylethoxy)- (9CI) (CA INDEX NAME)

NAME)

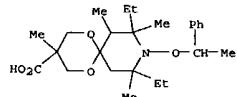


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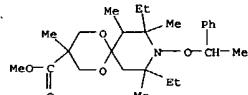


RN 437746-38-8 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane-3-carboxylic acid,
8,10-diethyl-3,7,8,10-

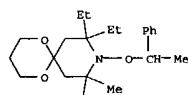
L9 ANSWER 1 OF 21 USPATFULL on STN (Continued)
tetramethyl-9-(1-phenylethoxy)- (9CI) (CA INDEX NAME)



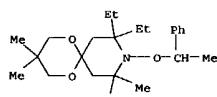
RN 437746-41-3 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane-3-carboxylic acid,
8,10-diethyl-3,7,8,10-
tetramethyl-9-(1-phenylethoxy)-, methyl ester (9CI) (CA INDEX NAME)



RN 437747-77-8 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 8,8-diethyl-10,10-dimethyl-9-(1-phenylethoxy)- (9CI) (CA INDEX NAME)

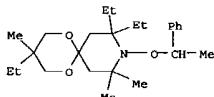


RN 437747-81-4 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane,
8,8-diethyl-3,3,10,10-tetramethyl-9-(1-phenylethoxy)- (9CI) (CA INDEX NAME)

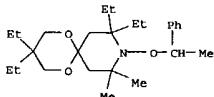


L9 ANSWER 1 OF 21 USPATFULL on STN (Continued)

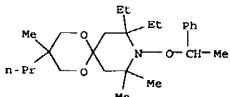
RN 437747-84-0 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3,8,8-triethyl-3,10,10-trimethyl-9-(1-phenylethoxy)- (9CI) (CA INDEX NAME)



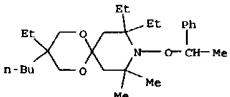
RN 437747-87-0 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane,
3,3,8,8-tetraethyl-10,10-dimethyl-9-(1-phenylethoxy)- (9CI) (CA INDEX NAME)



RN 437747-90-5 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 8,8-diethyl-3,10,10-trimethyl-9-(1-phenylethoxy)-3-propyl- (9CI) (CA INDEX NAME)

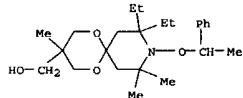


RN 437747-94-9 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane,
3-butyl-3,8,8-triethyl-10,10-dimethyl-9-(1-phenylethoxy)- (9CI) (CA INDEX NAME)

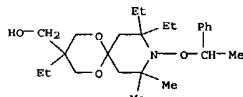


L9 ANSWER 1 OF 21 USPATFULL on STN (Continued)

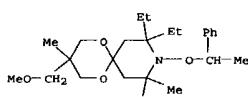
RN 437748-00-0 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane-3-methanol, 8,8-diethyl-3,10,10-
trimethyl-9-(1-phenylethoxy)- (9CI) (CA INDEX NAME)



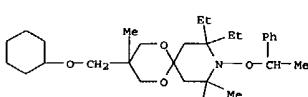
RN 437748-03-3 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane-3-methanol, 3,8,8-triethyl-10,10-
dimethyl-9-(1-phenylethoxy)- (9CI) (CA INDEX NAME)



RN 437748-06-6 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 8,8-diethyl-3-(methoxymethyl)-3,10,10-
trimethyl-9-(1-phenylethoxy)- (9CI) (CA INDEX NAME)



RN 437748-09-9 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3-[(cyclohexyloxy)methyl]-8,8-diethyl-
3,10,10-trimethyl-9-(1-phenylethoxy)- (9CI) (CA INDEX NAME)

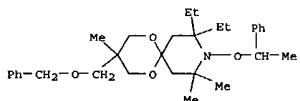


RN 437748-12-4 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 8,8-diethyl-3,10,10-trimethyl-9-(1-
phenylethoxy)-3-(phenylmethoxy)methyl- (9CI) (CA INDEX NAME)

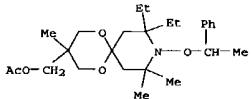
09/844986

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L9 ANSWER 1 OF 21 USPATFULL on STN (Continued)

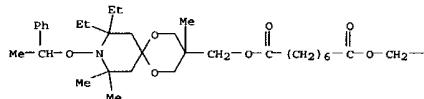


RN 437748-15-7 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane-3-methanol, 8,8-diethyl-3,10,10-trimethyl-9-(1-phenylethoxy)-, acetate (ester) (9CI) (CA INDEX NAME)

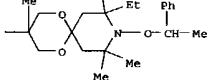


RN 437748-18-0 USPATFULL
CN Octanedioic acid, bis[8,8-diethyl-3,10,10-trimethyl-9-(1-phenylethoxy)-1,5-dioxa-9-azaspiro[5.5]undec-3-yl]methyl ester (9CI) (CA INDEX NAME)

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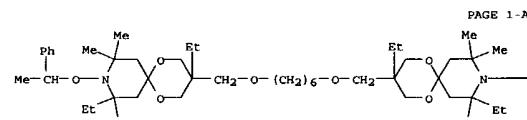
PAGE 1-B



RN 437748-21-5 USPATFULL

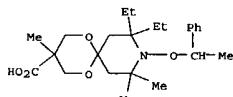
L9 ANSWER 1 OF 21 USPATFULL on STN (Continued)

CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3,3'-[1,6-hexamethylbis(oxy)methylene]bis[3,8,8-triethyl-10,10-dimethyl-9-(1-phenylethoxy)- (9CI) (CA INDEX NAME)

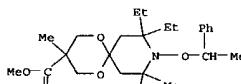


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RN 437748-24-8 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane-3-carboxylic acid, 8,8-diethyl-3,10,10-trimethyl-9-(1-phenylethoxy)- (9CI) (CA INDEX NAME)

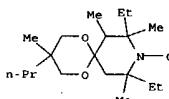


RN 437748-27-1 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane-3-carboxylic acid, 8,8-diethyl-3,10,10-trimethyl-9-(1-phenylethoxy)-, methyl ester (9CI) (CA INDEX NAME)

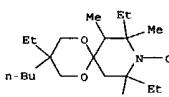


RN 437748-41-9 USPATFULL

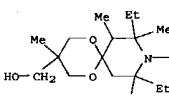
L9 ANSWER 1 OF 21 USPATFULL on STN (Continued)



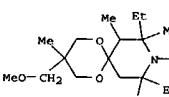
RN 437749-41-2 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 8,10-diethyl-7,8,10-trimethyl- (9CI) (CA INDEX NAME)



RN 437749-47-8 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,8,10-triethyl-3,7,8,10-tetramethyl- (9CI) (CA INDEX NAME)



RN 437749-50-3 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3,8,10-tetraethyl-7,8,10-trimethyl- (9CI) (CA INDEX NAME)

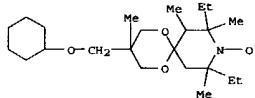


RN 437749-53-6 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 8,10-diethyl-3,7,8,10-tetramethyl-3-propyl- (9CI) (CA INDEX NAME)

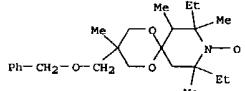
09/844986

7/6/04

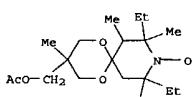
L9 ANSWER 1 OF 21 USPATFULL on STN (Continued)



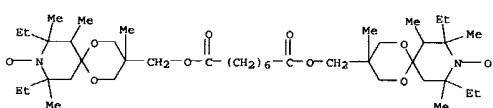
RN 437749-73-0 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy,
8,10-diethyl-3,7,8,10-tetramethyl-
3-[(phenylmethoxy)methyl]-(9CI) (CA INDEX NAME)



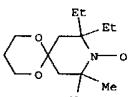
RN 437749-76-3 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy,
3-[(acetylxy)methyl]-8,10-diethyl-
3,7,8,10-tetramethyl- (9CI) (CA INDEX NAME)



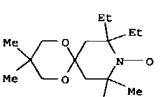
RN 437749-79-6 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3'-(1,8-dioxo-1,8-octanediyli)bis(oxyethylene)bis[8,10-diethyl-3,7,8,10-tetramethyl- (9CI) (CA INDEX NAME)]



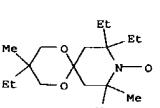
L9 ANSWER 1 OF 21 USPATFULL on STN (Continued)



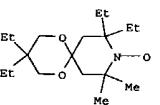
RN 437750-95-3 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy,
8,8-diethyl-3,3,10,10-tetramethyl-
(9CI) (CA INDEX NAME)



RN 437750-97-5 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,8,8-triethyl-3,10,10-trimethyl- (9CI) (CA INDEX NAME)



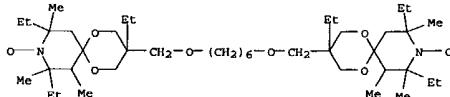
RN 437750-99-7 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy,
3,3,8,8-tetraethyl-10,10-dimethyl-
(9CI) (CA INDEX NAME)



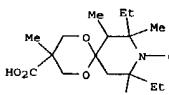
RN 437751-01-4 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 8,8-diethyl-3,10,10-trimethyl-3-
propyl- (9CI) (CA INDEX NAME)

L9 ANSWER 1 OF 21 USPATFULL on STN (Continued)

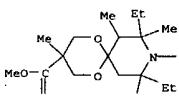
RN 437749-82-1 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3'-(1,6-hexamethylene)bis(oxyethylene)bis[3,8,10-triethyl-7,8,10-trimethyl- (9CI) (CA INDEX NAME)]



RN 437749-85-4 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3-carboxy-8,10-diethyl-3,7,8,10-tetramethyl- (9CI) (CA INDEX NAME)

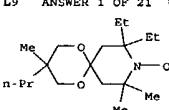


RN 437749-88-7 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 8,10-diethyl-3-(methoxycarbonyl)-
3,7,8,10-tetramethyl- (9CI) (CA INDEX NAME)

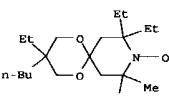


RN 437750-93-1 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 8,8-diethyl-10,10-dimethyl- (9CI) (CA INDEX NAME)

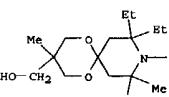
L9 ANSWER 1 OF 21 USPATFULL on STN (Continued)



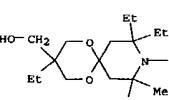
RN 437751-03-6 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3-butyl-3,8,8-triethyl-10,10-dimethyl- (9CI) (CA INDEX NAME)



RN 437751-07-0 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 8,8-diethyl-3-(hydroxymethyl)-
3,10,10-trimethyl- (9CI) (CA INDEX NAME)



RN 437751-09-2 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,8,8-triethyl-3-(hydroxymethyl)-
10,10-dimethyl- (9CI) (CA INDEX NAME)



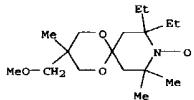
RN 437751-11-6 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 8,8-diethyl-3-(methoxymethyl)-
3,10,10-trimethyl- (9CI) (CA INDEX NAME)



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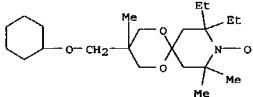
L9 ANSWER 1 OF 21 USPATFULL on STN

(Continued)



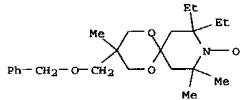
RN 437751-13-8 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3-[(cyclohexyloxy)methyl]-8,8-diethyl-3,10,10-trimethyl- (9CI) (CA INDEX NAME)



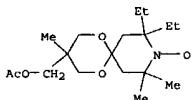
RN 437751-15-0 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 8,8-diethyl-3,10,10-trimethyl-3-[(phenylmethoxy)methyl]- (9CI) (CA INDEX NAME)



RN 437751-17-2 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3-[(acetoxy)methyl]-8,8-diethyl-3,10,10-trimethyl- (9CI) (CA INDEX NAME)



RN 437751-19-4 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3'-(1,8-dioxo-1,8-

L9 ANSWER 1 OF 21 USPATFULL on STN (Continued)

IT 376588-14-6P 376588-16-8P 437744-23-5P

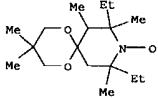
437744-30-4P 437744-34-8P

(N-alkoxy-4,4-dioxy-polyalkyl-piperidines, their N-oxides and

controlled radical polymerization therewith)

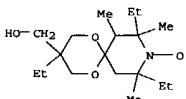
RN 376588-14-6 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 8,10-diethyl-3,8,10-tetramethyl- (9CI) (CA INDEX NAME)



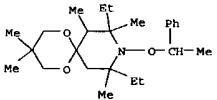
RN 376588-16-8 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,8,10-triethyl-3-(hydroxymethyl)-7,8,10-trimethyl- (9CI) (CA INDEX NAME)



RN 437744-23-5 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 8,10-diethyl-3,3,7,8,10-pentamethyl-9-(1-phenylethoxy)- (9CI) (CA INDEX NAME)

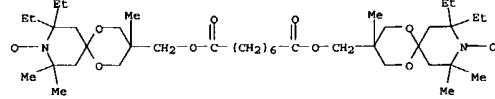


RN 437744-30-4 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3-[(acetoxy)methyl]-3,8,10-triethyl-7,8,10-trimethyl- (9CI) (CA INDEX NAME)

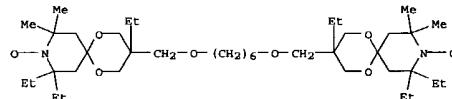
L9 ANSWER 1 OF 21 USPATFULL on STN (Continued)

octanediylibis(oxymethylene)bis[8,8-diethyl-3,10,10-trimethyl- (9CI) (CA INDEX NAME)



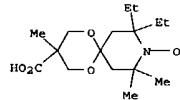
RN 437751-21-8 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3'-(1,6-hexanediylibis(oxymethylene)bis[3,8,8-triethyl-10,10-dimethyl- (9CI) (CA INDEX NAME)



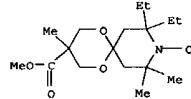
RN 437751-23-0 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3-carboxy-8,8-diethyl-3,10,10-trimethyl- (9CI) (CA INDEX NAME)

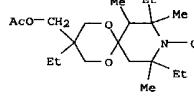


RN 437751-25-2 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 8,8-diethyl-3-(methoxycarbonyl)-3,10,10-trimethyl- (9CI) (CA INDEX NAME)

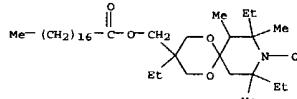


L9 ANSWER 1 OF 21 USPATFULL on STN (Continued)



RN 437744-34-8 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,8,10-triethyl-7,8,10-trimethyl-3-[(1-oxooctadecyl)oxy]methyl- (9CI) (CA INDEX NAME)

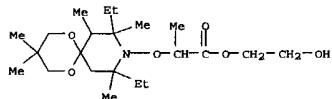


IT 437744-42-8P

(N-alkoxy-4,4-dioxy-polyalkyl-piperidines, their N-oxides and controlled radical polymerization therewith)

RN 437744-42-8 USPATFULL

CN Propanoic acid, 2-[(8,10-diethyl-3,3,7,8,10-pentamethyl-1,5-dioxa-9-azaspiro[5.5]undec-9-yloxy)-2-hydroxyethyl ester (9CI) (CA INDEX NAME)



L9 ANSWER 2 OF 21 USPATFULL on STN

AB The present invention relates to selected glycidyl or carbonyl functional N-alkoxy-4,4-dioxy-polyalkyl-piperidine compounds forming an open chain or cyclic ketal structure, a polymerizable composition comprising a) at least one ethylenically unsaturated monomer and b) a glycidyl or carbonyl functional N-alkoxy-4,4-dioxy-polyalkyl-piperidine nitroxide initiator compound. Further aspects of the present invention are a process for polymerizing ethylenically unsaturated monomers and the use of glycidyl or carbonyl functional N-alkoxy-4,4-dioxy-polyalkyl-piperidine nitroxide initiators for radical polymerization.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 2004:64524 USPATFULL

TI N-alkoxy-4,4-dioxy-polyalkyl-piperidine compounds, with glycidyl or alkylcarbonyl groups as functional initiators for controlled radical polymerization

IN Fusco, Francesco, Therwil, SWITZERLAND

Wunderlich, Wiebke, Bologna, FRANCE

Kramer, Andreas, Meyrize, SWITZERLAND

Fink, Jochen, Nussloch, GERMANY, FEDERAL REPUBLIC OF

PI US 2004049043 A1 20040311

AI US 2003-450227 A1 20030611 (10)

WO 2001-EP13071 20011112

PRAI EP 2000-8111916 20001214

DT Utility

FS APPLICATION

LREP CIBA SPECIALTY CHEMICALS CORPORATION, PATENT DEPARTMENT, 540 WHITE PLAINS RD, P O BOX 2005, TARRYTOWN, NY, 10591-9005

CLMN Number of Claims: 17

ECI Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1663

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 437993-46-1 437993-48-1 437993-49-2

437993-50-5 437993-51-6 437993-53-8

437993-54-2 437993-55-0 437993-56-1

437993-57-2 437993-58-3 437993-59-4

437993-60-7 437993-61-8 437993-97-0

437993-99-2 437994-00-8 437994-01-9

437994-02-0 437994-04-2 437994-05-3

437994-06-4 437994-07-5 437994-08-6

437994-09-7 437994-10-0 437994-11-1

437994-12-2 437994-49-5 437994-51-9

437994-52-0 437994-57-5 437994-58-6

437994-59-7 437994-60-0 437994-61-1

437994-62-2

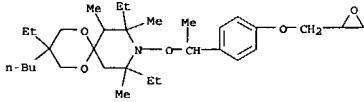
(N-alkoxy-4,4-dioxy-polyalkyl-piperidine nitroxides containing glycidyl or alkylcarbonyl groups as functional initiators for controlled radical polymerization)

RN 437993-46-9 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 8,10-diethyl-7,8,10-trimethyl-9-[1-[4-(oxiranylmethoxy)phenyl]ethoxy]- (9CI) (CA INDEX NAME)

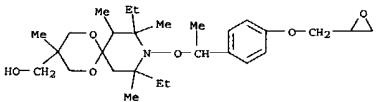
L9 ANSWER 2 OF 21 USPATFULL on STN (Continued)

CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3-butyl-3,8,10-triethyl-7,8,10-trimethyl-9-[1-[4-(oxiranylmethoxy)phenyl]ethoxy]- (9CI) (CA INDEX NAME)



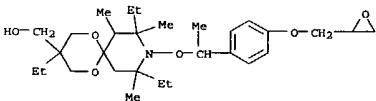
RN 437993-53-8 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undecane-3-methanol, 8,10-diethyl-3,7,8,10-tetramethyl-9-[1-[4-(oxiranylmethoxy)phenyl]ethoxy]- (9CI) (CA INDEX NAME)



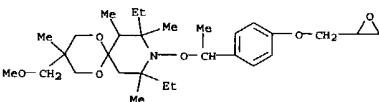
RN 437993-54-9 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undecane-3-methanol, 3,8,10-triethyl-7,8,10-trimethyl-9-[1-[4-(oxiranylmethoxy)phenyl]ethoxy]- (9CI) (CA INDEX NAME)

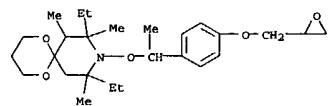


RN 437993-55-0 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 8,10-diethyl-3-(methoxymethyl)-3,7,8,10-tetramethyl-9-[1-[4-(oxiranylmethoxy)phenyl]ethoxy]- (9CI) (CA INDEX NAME)

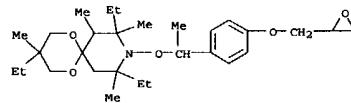


L9 ANSWER 2 OF 21 USPATFULL on STN (Continued)



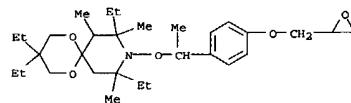
RN 437993-48-1 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3,8,10-triethyl-3,7,8,10-tetramethyl-9-[1-[4-(oxiranylmethoxy)phenyl]ethoxy]- (9CI) (CA INDEX NAME)



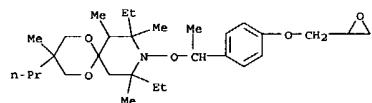
RN 437993-49-2 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3,3,8,10-tetraethyl-7,8,10-trimethyl-9-[1-[4-(oxiranylmethoxy)phenyl]ethoxy]- (9CI) (CA INDEX NAME)



RN 437993-50-5 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 8,10-diethyl-3,7,8,10-tetramethyl-9-[1-[4-(oxiranylmethoxy)phenyl]ethoxy]-3-propyl- (9CI) (CA INDEX NAME)



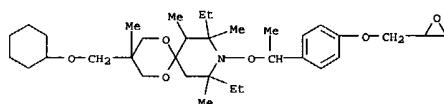
RN 437993-51-6 USPATFULL

L9 ANSWER 2 OF 21 USPATFULL on STN (Continued)

RN 437993-56-1 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3-[1-(cyclohexyloxy)methyl]-8,10-diethyl-3,7,8,10-tetramethyl-9-[1-[4-(oxiranylmethoxy)phenyl]ethoxy]- (9CI) (CA INDEX NAME)

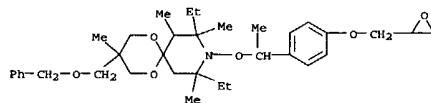
(CA INDEX NAME)



RN 437993-57-2 USPATFULL

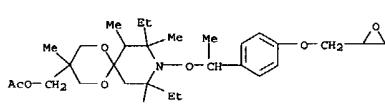
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 8,10-diethyl-3,7,8,10-tetramethyl-9-[1-[4-(oxiranylmethoxy)phenyl]ethoxy]-3-[1-(phenylmethoxy)methyl]- (9CI) (CA INDEX NAME)

(CA INDEX NAME)



RN 437993-58-3 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undecane-3-methanol, 8,10-diethyl-3,7,8,10-tetramethyl-9-[1-[4-(oxiranylmethoxy)phenyl]ethoxy]-, acetate (ester) (9CI) (CA INDEX NAME)



RN 437993-59-4 USPATFULL

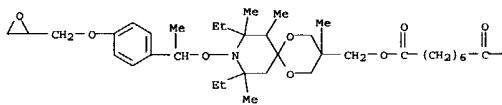
CN Octanedioic acid, bis[(8,10-diethyl-3,7,8,10-tetramethyl-9-[1-[4-(oxiranylmethoxy)phenyl]ethoxy]-1,5-dioxa-9-azaspiro[5.5]undec-3-yl)methyl] ester (9CI) (CA INDEX NAME)



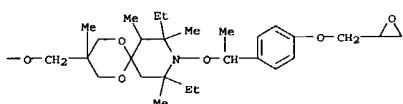
7/6/04

L9 ANSWER 2 OF 21 USPATFULL on STN (Continued)

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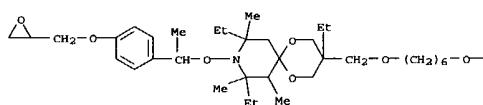


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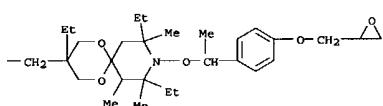


RN 437993-60-7 USPATFULL
 CN 1,5-Dioxa-9-azaspiro[5.5]undecane,
 $3,3'-(1,6-hexanediyl)bis(oxyethylene)$
 $[(3,8,10-triethyl-7,8,10-trimethyl-9-[1-(4-oxiranylmethoxy)phenyl]ethoxy)- (9CI) (CA INDEX NAME)$

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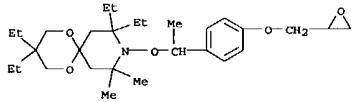


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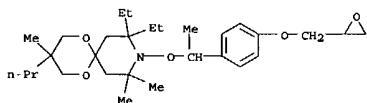


RN 437993-61-8 USPATFULL

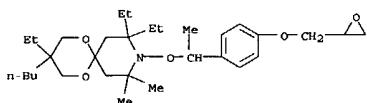
L9 ANSWER 2 OF 21 USPATFULL on STN (Continued)



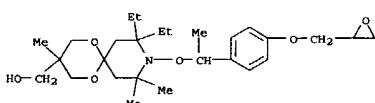
RN 437994-01-9 USPATFULL
 CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 8,8-diethyl-3,10,10-trimethyl-9-[1-(4-oxiranylmethoxy)phenyl]ethoxy-3-propyl - (9CI) (CA INDEX NAME)



RN 437994-02-0 USPATFULL
 CN 1,5-Dioxa-9-azaspiro[5.5]undecane,
 $3\text{-butyl-}3,8,8\text{-triethyl-}10,10\text{-dimethyl-}9-[1-(4\text{-oxiranylmethoxy)phenyl}]\text{ethoxy}- (9CI) (CA INDEX NAME)$

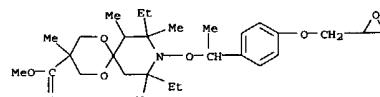


RN 437994-04-2 USPATFULL
 CN 1,5-Dioxa-9-azaspiro[5.5]undecane-3-methanol, 8,8-diethyl-3,10,10-trimethyl-9-[1-(4-oxiranylmethoxy)phenyl]ethoxy - (9CI) (CA INDEX NAME)

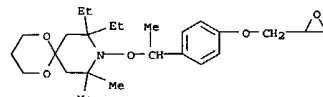


RN 437994-05-3 USPATFULL
 CN 1,5-Dioxa-9-azaspiro[5.5]undecane-3-methanol, 3,8,8-triethyl-10,10-dimethyl-9-[1-(4-oxiranylmethoxy)phenyl]ethoxy - (9CI) (CA INDEX NAME)

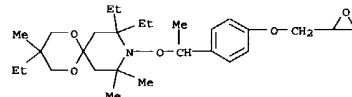
L9 ANSWER 2 OF 21 USPATFULL on STN (Continued)
 CN 1,5-Dioxa-9-azaspiro[5.5]undecane-3-carboxylic acid,
 $8,10\text{-diethyl-}3,7,8,10\text{-tetramethyl-}9-[1-(4\text{-oxiranylmethoxy)phenyl}]\text{ethoxy}-, \text{methyl ester}$
 (9CI) (CA INDEX NAME)



RN 437993-97-0 USPATFULL
 CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 8,8-diethyl-10,10-dimethyl-9-[1-(4-oxiranylmethoxy)phenyl]ethoxy - (9CI) (CA INDEX NAME)



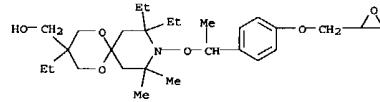
RN 437993-99-2 USPATFULL
 CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3,8,8-triethyl-3,10,10-trimethyl-9-[1-(4-oxiranylmethoxy)phenyl]ethoxy - (9CI) (CA INDEX NAME)



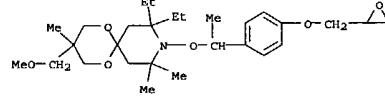
RN 437994-00-8 USPATFULL
 CN 1,5-Dioxa-9-azaspiro[5.5]undecane,
 $3,3,8,8\text{-tetraethyl-}10,10\text{-dimethyl-}9-[1-(4\text{-oxiranylmethoxy)phenyl}]\text{ethoxy}- (9CI) (CA INDEX NAME)$

L9 ANSWER 2 OF 21 USPATFULL on STN (Continued)

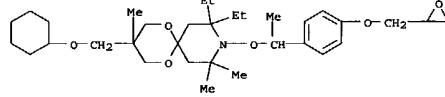
L9 ANSWER 2 OF 21 USPATFULL on STN (Continued)



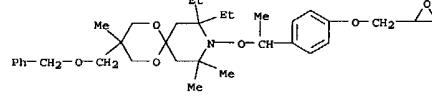
RN 437994-06-4 USPATFULL
 CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 8,8-diethyl-3-(methoxymethyl)-3,10,10-trimethyl-9-[1-(4-oxiranylmethoxy)phenyl]ethoxy - (9CI) (CA INDEX NAME)



RN 437994-07-5 USPATFULL
 CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3-[(cyclohexyloxy)methyl]-8,8-diethyl-3,10,10-trimethyl-9-[1-(4-oxiranylmethoxy)phenyl]ethoxy - (9CI) (CA INDEX NAME)



RN 437994-08-6 USPATFULL
 CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 8,8-diethyl-3,10,10-trimethyl-9-[1-(4-oxiranylmethoxy)phenyl]ethoxy-3-(phenylmethoxy)methyl - (9CI) (CA INDEX NAME)

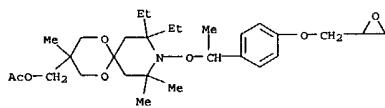


RN 437994-09-7 USPATFULL
 CN 1,5-Dioxa-9-azaspiro[5.5]undecane-3-methanol, 8,8-diethyl-3,10,10-trimethyl-9-[1-(4-oxiranylmethoxy)phenyl]ethoxy-, acetate (ester)
 (9CI) (CA INDEX NAME)

09/844986

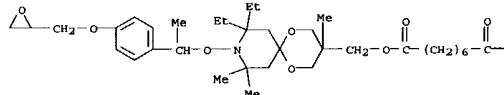
7/6/04

L9 ANSWER 2 OF 21 USPATFULL on STN (Continued)

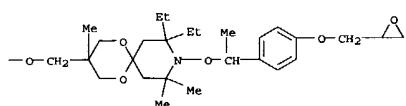


RN 437994-10-0 USPATFULL
CN Octanedioic acid, bis[[8,8-diethyl-3,10,10-trimethyl-9-[1-[4-(oxiranylmethoxy)phenyl]ethoxy]-1,5-dioxa-9-azaspiro[5.5]undec-3-yl]methyl] ester (9CI) (CA INDEX NAME)

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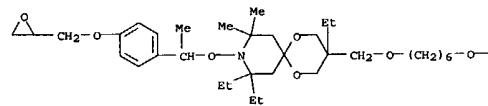
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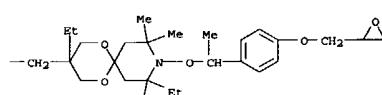
RN 437994-11-1 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3,3'-[1,6-hexanediylibis(oxyethylene)]bis[3,8,8-triethyl-10,10-dimethyl-9-[1-[4-(oxiranylmethoxy)phenyl]ethoxy]- (9CI) (CA INDEX NAME)

L9 ANSWER 2 OF 21 USPATFULL on STN (Continued)

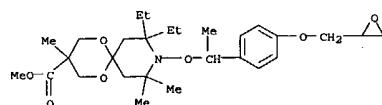
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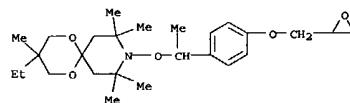
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RN 437994-12-2 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane-3-carboxylic acid, 8,8-diethyl-3,10,10-trimethyl-9-[1-[4-(oxiranylmethoxy)phenyl]ethoxy]-, methyl ester (9CI) (CA INDEX NAME)

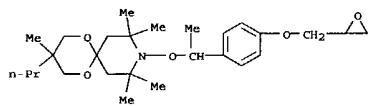


RN 437994-49-5 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3-ethyl-3,8,8,10,10-pentamethyl-9-[1-[4-(oxiranylmethoxy)phenyl]ethoxy]- (9CI) (CA INDEX NAME)

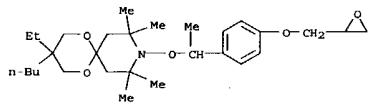


RN 437994-51-9 USPATFULL

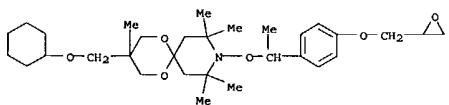
L9 ANSWER 2 OF 21 USPATFULL on STN (Continued)
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3,8,8,10,10-pentamethyl-9-[1-[4-(oxiranylmethoxy)phenyl]ethoxy]-3-propyl- (9CI) (CA INDEX NAME)



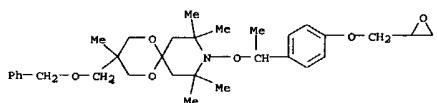
RN 437994-52-0 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3-butyl-3-ethyl-8,8,10,10-tetramethyl-9-[1-[4-(oxiranylmethoxy)phenyl]ethoxy]- (9CI) (CA INDEX NAME)



RN 437994-57-5 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3-[(cyclohexyloxy)methyl]-3,8,8,10,10-pentamethyl-9-[1-[4-(oxiranylmethoxy)phenyl]ethoxy]- (9CI) (CA INDEX NAME)



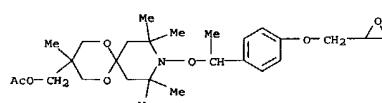
RN 437994-58-6 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3,8,8,10,10-pentamethyl-9-[1-[4-(oxiranylmethoxy)phenyl]ethoxy]-3-[(phenyloxymethyl)- (9CI) (CA INDEX NAME)



RN 437994-59-7 USPATFULL

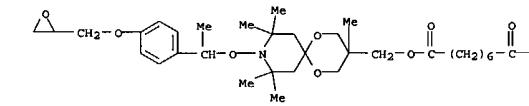
09/844986

L9 ANSWER 2 OF 21 USPATFULL on STN (Continued)
CN 1,5-Dioxa-9-azaspiro[5.5]undecane-3-methanol, 3,8,8,10,10-pentamethyl-9-[1-[4-(oxiranylmethoxy)phenyl]ethoxy]-, acetate (ester) (9CI) (CA INDEX NAME)

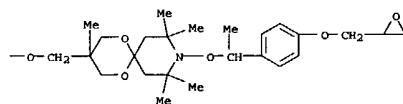


RN 437994-60-0 USPATFULL
CN Octanedioic acid, bis[[3,8,8,10,10-pentamethyl-9-[1-[4-(oxiranylmethoxy)phenyl]ethoxy]-1,5-dioxa-9-azaspiro[5.5]undec-3-yl]methyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

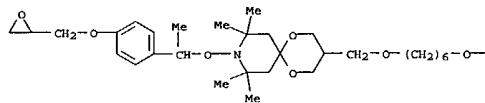


RN 437994-61-1 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3,3'-[1,6-hexanediylibis(oxyethylene)]bisis[8,8,10,10-tetramethyl-9-[1-[4-(oxiranylmethoxy)phenyl]ethoxy]- (9CI) (CA INDEX NAME)

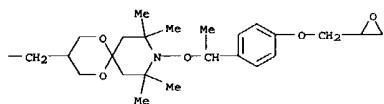
7/6/04

L9 ANSWER 2 OF 21 USPATFULL on STN (Continued)

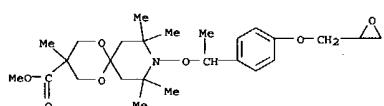
PAGE 1-A



PAGE 1-B

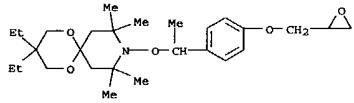


RN 437994-62-2 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane-3-carboxylic acid, 3,8,8,10,10-pentamethyl-9-[1-(4-(oxiranylmethoxy)phenyl)ethoxy]-, methyl ester (9CI) (CA INDEX NAME)

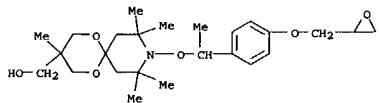


IT 434898-80-3P 437993-47-0P 437993-98-1P
437994-48-4P 437994-50-8P 437994-54-2P
437994-55-3P 437994-56-4P 437994-68-8P
437994-69-9P 437994-70-2P 437994-71-3P
437994-72-4P 437994-73-5P
(N-alkoxy-4,4-dioxy polyalkyl-piperidine nitroxides containing glycidyl or alkylcarbonyl groups as functional initiators for controlled radical polymerization)
RN 434898-80-3 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3,3,8,8,10,10-hexamethyl-9-[1-(4-(oxiranylmethoxy)phenyl)ethoxy]- (9CI) (CA INDEX NAME)

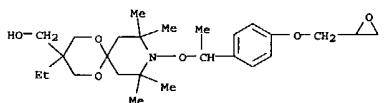
L9 ANSWER 2 OF 21 USPATFULL on STN (Continued)
(4-(oxiranylmethoxy)phenyl)ethoxy]- (9CI) (CA INDEX NAME)



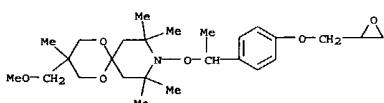
RN 437994-54-2 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane-3-methanol, 3,8,8,10,10-pentamethyl-9-[1-(4-(oxiranylmethoxy)phenyl)ethoxy]- (9CI) (CA INDEX NAME)



RN 437994-55-3 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane-3-methanol, 3-ethyl-8,8,10,10-tetramethyl-9-[1-(4-(oxiranylmethoxy)phenyl)ethoxy]- (9CI) (CA INDEX NAME)

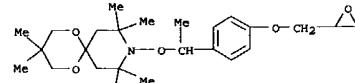


RN 437994-56-4 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3-(methoxymethyl)-3,8,8,10,10-pentamethyl-9-[1-(4-(oxiranylmethoxy)phenyl)ethoxy]- (9CI) (CA INDEX NAME)

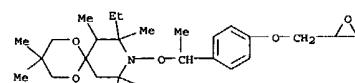


RN 437994-68-8 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3,8,8,10,10-pentamethyl-9-[1-(4-

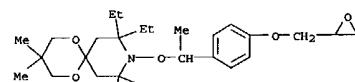
L9 ANSWER 2 OF 21 USPATFULL on STN (Continued)



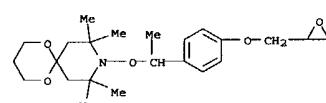
RN 437993-47-0 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 8,10-diethyl-3,3,7,8,10-pentamethyl-9-[1-(4-(oxiranylmethoxy)phenyl)ethoxy]- (9CI) (CA INDEX NAME)



RN 437993-98-1 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 8,8-diethyl-3,3,10,10-tetramethyl-9-[1-(4-(oxiranylmethoxy)phenyl)ethoxy]- (9CI) (CA INDEX NAME)

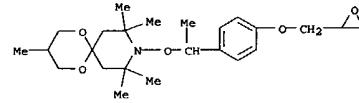


RN 437994-48-4 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 8,8,10,10-tetramethyl-9-[1-(4-(oxiranylmethoxy)phenyl)ethoxy]- (9CI) (CA INDEX NAME)

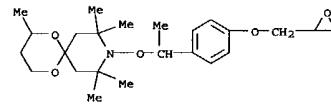


RN 437994-50-8 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3,3-diethyl-8,8,10,10-tetramethyl-9-[1-

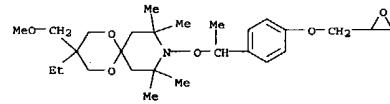
L9 ANSWER 2 OF 21 USPATFULL on STN (Continued)
(oxiranylmethoxy)phenyl)ethoxy]- (9CI) (CA INDEX NAME)



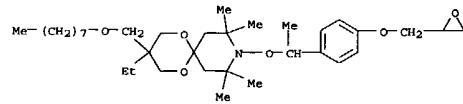
RN 437994-69-9 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 2,8,8,10,10-pentamethyl-9-[1-(4-(oxiranylmethoxy)phenyl)ethoxy]- (9CI) (CA INDEX NAME)



RN 437994-70-2 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3-ethyl-1-(methoxymethyl)-8,8,10,10-tetramethyl-9-[1-(4-(oxiranylmethoxy)phenyl)ethoxy]- (9CI) (CA INDEX NAME)



RN 437994-71-3 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3-ethyl-8,8,10,10-tetramethyl-3-((octyloxy)methyl)-9-[1-(4-(oxiranylmethoxy)phenyl)ethoxy]- (9CI) (CA INDEX NAME)

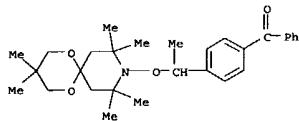


RN 437994-72-4 USPATFULL
CN Methanone, 4-[1-((3,3,8,8,10,10-hexamethyl-1,5-dioxa-9-azaspiro[5.5]undec-

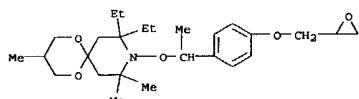
09/844986

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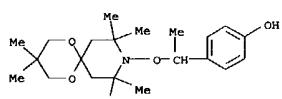
L9 ANSWER 2 OF 21 USPATFULL on STN (Continued)
9-yloxyethylphenylphenyl- (9CI) (CA INDEX NAME)



RN 437994-73-5 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 8,8-diethyl-3,10,10-trimethyl-9-[1-[4-(oxiranylmethoxy)phenyl]ethoxy]- (9CI) (CA INDEX NAME)

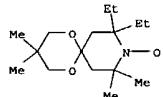


IT 437994-67-7P
(intermediate; N-alkoxy-4,4-dioxy-polyalkyl-piperidine nitroxides containing glycidyl or alkylcarbonyl groups as functional initiators for controlled radical polymerization)
RN 437994-67-7 USPATFULL
CN Phenol, 4-[1-[(3,3,8,8,10,10-hexamethyl-1,5-dioxa-9-azaspiro[5.5]undec-9-yloxyethyl)-, (9CI) (CA INDEX NAME)

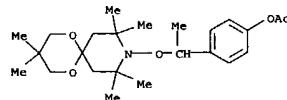


IT 437994-66-6P
(intermediate; preparation of acetic acid
4-[1-(3,3,8,8,10,10-hexamethyl-1,5-dioxa-9-azaspiro[5.5]undec-9-yloxyethylphenyl ester)
RN 437994-66-6 USPATFULL
CN Phenol, 4-[1-[(3,3,8,8,10,10-hexamethyl-1,5-dioxa-9-azaspiro[5.5]undec-9-yloxyethyl)-, acetate (ester) (9CI) (CA INDEX NAME)

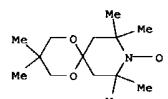
L9 ANSWER 2 OF 21 USPATFULL on STN (Continued)



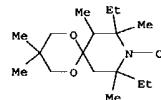
L9 ANSWER 2 OF 21 USPATFULL on STN (Continued)



IT 98254-32-1 376588-14-6 437750-95-3
(reactant; preparation of N-alkoxy-4,4-dioxy-polyalkyl-piperidine nitroxides containing glycidyl or alkylcarbonyl groups as functional initiators for controlled radical polymerization)
RN 98254-32-1 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3,8,8,10,10-hexamethyl- (9CI) (CA INDEX NAME)



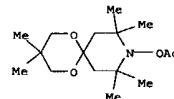
RN 376588-14-6 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 8,8-diethyl-3,3,8,10-tetramethyl- (9CI) (CA INDEX NAME)



RN 437750-95-3 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 8,8-diethyl-3,3,10,10-tetramethyl- (9CI) (CA INDEX NAME)

L9 ANSWER 3 OF 21 USPATFULL on STN
AB The invention relates to novel cyclic and open-chain hydroxylamine esters and polymerizable compositions comprising these hydroxylamine esters and an ethylenically unsaturated monomer or oligomer. The invention also relates to use as polymerization initiators and to the use of known hydroxylamine esters selected from the group consisting of HALS compounds and the novel hydroxylamine esters for the controlled degradation of polypropylene and for achieving a controlled increase in the molecular weight of polyethylene.

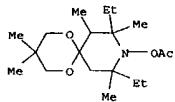
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AN 2003-307058 USPATFULL
TI Hydroxylamine esters as polymerization initiators
IN Roth, Michael, Lautertal, GERMANY, FEDERAL REPUBLIC OF
Pfandner, Rudolf, Rimbach, GERMANY, FEDERAL REPUBLIC OF
Nezvadba, Peter, Marly, SWITZERLAND
Zink, Marie-Odile, Steinbach, FRANCE
PI US 2003216494 A1 20031120
AI US 2002-275495 A1 20021105 (10)
WO 2001-EP5447 20010514
DT Utility
FS APPLICATION
LREP CIBA SPECIALTY CHEMICALS CORPORATION, PATENT DEPARTMENT, 540 WHITE
PLAINS RD, P O BOX 2005, TARRYTOWN, NY, 10591-9005
CLMN Number of Claims: 18
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 3966
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 376588-09-9P 376588-13-5P 376588-15-7P
376588-17-9P
(hydroxylamine esters as polymerization initiators and controlling
degradation and
mol. weight of polymers)
RN 376588-09-9 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane,
9-(acetoxy)-3,3,8,8,10,10-hexamethyl- (9CI) (CA INDEX NAME)



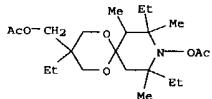
RN 376588-13-5 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 9-(acetoxy)-8,10-diethyl-3,3,7,8,10-pentamethyl- (9CI) (CA INDEX NAME)

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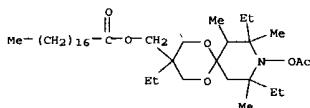
L9 ANSWER 3 OF 21 USPATFULL on STN (Continued)



RN 376588-15-7 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undecane-3-methanol, 9-(acetoxy)-3,8,10-triethyl-7,8,10-trimethyl-, acetate (ester) (9CI) (CA INDEX NAME)

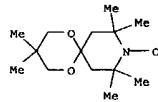


RN 376588-17-9 USPATFULL
CN Octadecanoic acid, [9-(acetoxy)-3,8,10-triethyl-7,8,10-trimethyl-1,5-dioxa-9-azaspiro[5.5]undec-3-yl]methyl ester (9CI) (CA INDEX NAME)

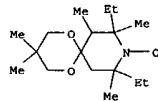


IT 98254-32-1 376588-14-6 376588-16-8
(hydroxylamine esters as polymerization initiators and controlling degradation and mol. weight of polymers)
RN 98254-32-1 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3,8,8,10,10-hexamethyl- (9CI) (CA INDEX NAME)

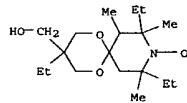
L9 ANSWER 3 OF 21 USPATFULL on STN (Continued)



RN 376588-14-6 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,8,10-triethyl-3,8,10-tetramethyl- (9CI) (CA INDEX NAME)



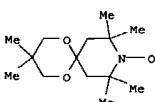
RN 376588-16-8 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,8,10-triethyl-3-(hydroxymethyl)-7,8,10-trimethyl- (9CI) (CA INDEX NAME)



L9 ANSWER 4 OF 21 USPATFULL on STN
AB The invention is directed to a method of making carboxylated cellulose fibers whose fiber strength and degree of polymerization is not significantly sacrificed. The method involves the use of cyclic nitroxide free radical compounds as a primary oxidant and a hypohalite salt as a secondary oxidant in an aqueous environment. Preferably the oxidized cellulose is then stabilized against D.P. loss in alkaline environments and color reversion with a reducing agent such as sodium borohydride. Alternatively it may be treated with an oxidant such as sodium chlorite. The method results in a high percentage of carboxyl groups located at the fiber surface. The product is especially useful
as a papermaking fiber where it contributes strength and has a higher attraction for cationic additives. The product is also useful as an additive to recycled fiber to increase strength. The method can be used to improve properties of either virgin or recycled fiber. It does not require high α -cellulose fiber but is suitable for regular market pulp.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AN 2003-53389 USPATFULL
TI Method of making carboxylated cellulose fibers and products of the method
IN Jewell, Richard A., Bellevue, WA, United States
Komen, Joseph Lincoln, Bothell, WA, United States
Su, Bing, Federal Way, WA, United States
Weeraswarna, S. Ananda, Seattle, WA, United States
Li, Yong, Tacoma, WA, United States
PA Weyerhaeuser Company, Federal Way, WA, United States (U.S. corporation)
PI US 6524348 B1 20030225
AI US 2000-641276 20000817 (9)
RLI Continuation-in-part of Ser. No. US 1999-418909, filed on 15 Oct 1999, now patented, Pat. No. US 6379494 Continuation-in-part of Ser. No. US 1999-272137, filed on 19 Mar 1999, now abandoned
DT Utility
FS GRANTED
EXNAM Primary Examiner: Einemann, Margaret
CLMN Number of Claims: 64
ECL Exemplary Claim: 1
DRWn 6 Drawing Figure(s); 6 Drawing Page(s)
LN.CNT 1477
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 98254-32-1
for (cellulose fiber treated with; making carboxylated cellulose fibers
for papermaking)
RN 98254-32-1 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3,8,8,10,10-hexamethyl- (9CI) (CA INDEX NAME)

L9 ANSWER 4 OF 21 USPATFULL on STN (Continued)



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L9 ANSWER 5 OF 21 USPATFULL on STN
 AB The present invention discloses a series of novel hindered spiro-ketal nitroxides prepared by the ketolization reaction of 1,3-propanediols with triacetoneamine followed by oxidation.

This invention also shows that these novel spiro-nitroxides are capable of inhibiting vinyl and acrylate polymerizations using an effective inhibition concentration of the nitroxide of the present invention.

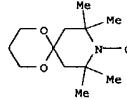
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 2003:11326 USPATFULL
 TI Novel hindered spiro-ketal nitroxides
 IN Jaworsuk, Mikolaj, Franklin, WI, UNITED STATES
 Clumpner, J. Michael, Delavan, WI, UNITED STATES
 O'Lenick, Anthony J., JR., Dacula, GA, UNITED STATES
 PI US 2003009031 A1 20030109
 AI US 2001-844986 A1 20010430 (9)
 DT Utility
 FS APPLICATION
 LREP A.J. O'Lenick, Jr., 2170 Luke Edwards Road, Dacula, GA, 30019
 CLMN Number of Claims: 9
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 248

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 482641-70-3P 482641-71-4P 482641-73-6P
 482641-75-8P 482641-77-0P 482641-79-2P
 482641-80-5P 482641-81-6P
 (hindered spiro-ketal nitroxide polymerization inhibitors for vinyl
 and
 acrylate monomers)

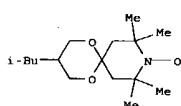
RN 482641-70-3 USPATFULL
 CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)



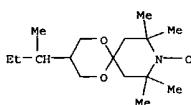
RN 482641-71-4 USPATFULL
 CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,8,8,10,10-pentamethyl- (9CI) (CA INDEX NAME)

L9 ANSWER 5 OF 21 USPATFULL on STN (Continued)

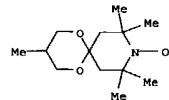
RN 482641-80-5 USPATFULL
 CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 8,8,10,10-tetramethyl-3-(2-methylpropyl)- (9CI) (CA INDEX NAME)



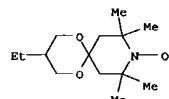
RN 482641-81-6 USPATFULL
 CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 8,8,10,10-tetramethyl-3-(1-methylpropyl)- (9CI) (CA INDEX NAME)



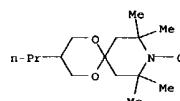
L9 ANSWER 5 OF 21 USPATFULL on STN (Continued)



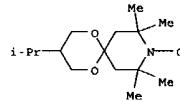
RN 482641-73-6 USPATFULL
 CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3-ethyl-8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)



RN 482641-75-8 USPATFULL
 CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 8,8,10,10-tetramethyl-3-propyl- (9CI) (CA INDEX NAME)



RN 482641-77-0 USPATFULL
 CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 8,8,10,10-tetramethyl-3-(1-methylethyl)- (9CI) (CA INDEX NAME)



RN 482641-79-2 USPATFULL
 CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3-butyl-8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)

L9 ANSWER 6 OF 21 USPATFULL on STN

AB The present invention is concerned with a novel process for the making of a compound of formula I ##STR1## by oxidizing the corresponding 3-hydroxymethyl-cephem derivative with an inorganic hypohalite or inorganic halite in the presence of compounds of formula III ##STR2##

is wherein R.sup.1, R.sup.2, R.sup.3, R.sup.4, R.sup.5, R.sup.6, and Y are as defined herein.

The process is useful for providing 3-formyl-cephem compounds useful in the making of cephalosporin derivatives.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 97:42991 USPATFULL
 TI Process for making 3-formylcephem derivatives
 IN Lohri, Bruno, Kaiseraugst, Switzerland
 Vogt, Peter, M unchenstein, Switzerland
 PA Hoffmann-La Roche Inc., Nutley, NJ, United States (U.S. corporation)
 PI US 5631366 19970520
 AI US 1995-573825 19951218 (8)

PRAI CH 1995-93 19950112

DT Utility

FS Granted

EXNAM Primary Examiner: Ford, John M.

LREP Johnston, George W., Tramaloni, Dennis P., Kass, Alan P.

CLMN Number of Claims: 34

ECL Exemplary Claim: 1

DRWN No Drawings

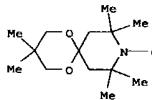
LN.CNT 450

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 98254-32-1 (process for the preparation of 3-formylcephem derivs. from 3-(hydroxymethyl)cephems)

RN 98254-32-1 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3,8,8,10,10-hexamethyl- (9CI) (CA INDEX NAME)



7/6/04

L9 ANSWER 7 OF 21 USPATFULL on STN

AB 1-Hydrocarboxy substituted hindered amine compounds which also contain a reactive functional group such as hydroxy, amino, oxirane or carboxyl can be chemically attached to selected polymer substrates by condensation reactions to give polymers containing a chemically-bonded, non-migrating stabilizer having excellent stabilization efficacy for protecting said polymer substrate from the adverse effects of actinic light.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 95:73751 USPATFULL
TI Non-migrating 1-hydrocarboxy hindered amine derivatives as polymer stabilizers

IN Galbo, James P., Hartsdale, NY, United States

Ravichandran, Ramanathan, Nanuet, NY, United States

Schirrmann, Peter J., Fairfield, CT, United States

Mar, Andrew, Norwalk, CT, United States

PA Ciba-Geigy Corporation, Ardsley, NY, United States (U.S. corporation)

PI US 5442071 19950815

AI US 1994-284959 19940802 (8)

RLI Division of Ser. No. US 1994-179652, filed on 7 Jan 1994, now patented, Pat. No. US 5350969 which is a division of Ser. No. US 1992-903699, filed on 24 Jun 1992, now patented, Pat. No. US 5286865 which is a division of Ser. No. US 1990-480173, filed on 14 Feb 1990, now

patented, Pat. No. US 5145893 which is a continuation-in-part of Ser. No. US 1989-326702, filed on 21 Mar 1989, now abandoned

DT Utility

FS Granted

EXNM Primary Examiner: Chang, Ceila

LREP Hall, Luther A. R.

CLMN Number of Claims: 5

ECL Exemplary Claim: 1

DRWN No Drawings

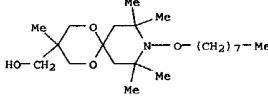
LN.CNT 1672

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 132416-44-5 (light stabilizers, nonmigrating, for polymers)

RN 132416-44-5 USPATFULL

CN 1,5-Dioxa-9-azapiro[5.5]undecane-3-methanol, 3,8,8,10,10-pentamethyl-9-(octyloxy)- (9CI) (CA INDEX NAME)



L9 ANSWER 8 OF 21 USPATFULL on STN

AB 1-Hydrocarboxy substituted hindered amine compounds which also

contain a reactive functional group such as hydroxy, amino, oxirane or carboxyl can be chemically attached to selected polymer substrates by condensation reactions to give polymers containing a chemically-bonded, non-migrating stabilizer having excellent stabilization efficacy for protecting said polymer substrate from the adverse effects of actinic light.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 94:93446 USPATFULL
TI Non-migrating 1-hydrocarboxy hindered amine derivatives as polymer stabilizers

IN Galbo, James P., Hartsdale, NY, United States

Ravichandran, Ramanathan, Nanuet, NY, United States

Schirrmann, Peter J., Fairfield, CT, United States

Mar, Andrew, Norwalk, CT, United States

PA Ciba-Geigy Corporation, Ardsley, NY, United States (U.S. corporation)

PI US 5350969 199401025

AI US 1994-179652 19940107 (8)

RLI Division of Ser. No. US 1992-903699, filed on 24 Jun 1992, now patented, Pat. No. US 5286865 which is a division of Ser. No. US 1990-480173, filed on 14 Feb 1990, now

patented, Pat. No. US 5145893 which is a continuation-in-part of Ser. No. US 1989-326702, filed on 21 Mar 1989, now abandoned

DT Utility

FS Granted

EXNM Primary Examiner: Chang, Celia

LREP Hall, Luther A. R.

CLMN Number of Claims: 5

ECL Exemplary Claim: 1

DRWN No Drawings

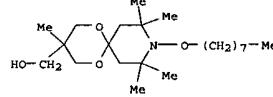
LN.CNT 1583

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 132416-44-5 (light stabilizers, nonmigrating, for polymers)

RN 132416-44-5 USPATFULL

CN 1,5-Dioxa-9-azapiro[5.5]undecane-3-methanol, 3,8,8,10,10-pentamethyl-9-(octyloxy)- (9CI) (CA INDEX NAME)



L9 ANSWER 9 OF 21 USPATFULL on STN

AB Pigment compositions comprising

a) at least one organic pigment selected from the group consisting of diketopyrrolopyrroles, azo pigments quinacridones, quinophthalones, phthalocyanines, indanthrones, flavanthrenes, pyranthrenes, anthraquinones, perylenes, dioxazines, perinones, thiocindigo, isoindolines isoindolinones and metal complexes and

b) 0.01 to 100% by weight, based on the pigment, of a condensation or addition polymer, the recurring molecular unit of which contains at least one radical containing a nitroxyl or hydroxylamino group or is substituted by a side group containing a nitroxyl or hydroxylamino group, and copolymers thereof with one another or with nitroxyl- or hydroxylamino-free components.

These pigment compositions are distinguished by outstanding resistance to light and weathering.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 94:18178 USPATFULL

TI Stabilization of organic pigments

IN Chasnot, Laurent, Prakman, Switzerland

PA Ciba-Geigy Corporation, Ardsley, NY, United States (U.S. corporation)

PI US 5348580 19940920

AI US 1993-111530 19930825 (8)

PRA1 CH 1992-2763 19920903

DT Utility

FS Granted

EXNM Primary Examiner: Group, Karl; Assistant Examiner: Hertzog, Scott L.

LREP Kovalski, Michele A.; Hall, Luther A. R.

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 990

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 157095-54-0 (light stabilizers, for organic pigments)

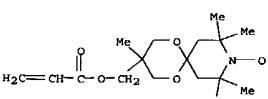
RN 157095-54-0 USPATFULL

CN 1,5-Dioxa-9-azapiro[5.5]undecane-3-methanol, 3,8,8,10,10-pentamethyl-9-(2-propenyl)oxymethyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 157095-53-9

CMF C17 H28 N 05



L9 ANSWER 10 OF 21 USPATFULL on STN

AB 1-Hydrocarboxy substituted hindered amine compounds which also

contain a reactive functional group such as hydroxy, amino, oxirane or carboxyl can be chemically attached to selected polymer substrates by condensation reactions to give polymers containing a chemically-bonded, non-migrating stabilizer having excellent stabilization efficacy for protecting said polymer substrate from the adverse effects of actinic light.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 94:13661 USPATFULL

TI Non-migrating 1-hydrocarboxy hindered amine derivatives as polymer stabilizers

IN Galbo, James P., Hartsdale, NY, United States

Ravichandran, Ramanathan, Nanuet, NY, United States

Schirrmann, Peter J., Fairfield, CT, United States

Mar, Andrew, Norwalk, CT, United States

PA Ciba-Geigy Corporation, Ardsley, NY, United States (U.S. corporation)

PI US 5286865 19940215

AI US 1992-903699 19920624 (7)

RLI Division of Ser. No. US 1990-480173, filed on 14 Feb 1990, now

patented, Pat. No. US 5145893, issued on 8 Sep 1992 which is a continuation-in-part of Ser. No. US 1989-326702, filed on 21 Mar 1989, now abandoned

DT Utility

FS Granted

EXNM Primary Examiner: Ivy, C. Warren; Assistant Examiner: Chang, Celia

LREP Hall, Luther A. R.

CLMN Number of Claims: 13

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1609

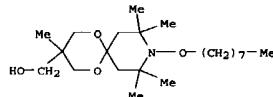
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 132416-44-5

(light stabilizers, nonmigrating, for polymers)

RN 132416-44-5 USPATFULL

CN 1,5-Dioxa-9-azapiro[5.5]undecane-3-methanol, 3,8,8,10,10-pentamethyl-9-(2-propenyl)oxymethyl-, homopolymer (9CI) (CA INDEX NAME)

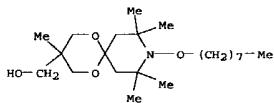


7/6/04

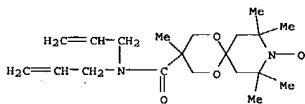
L9 ANSWER 11 OF 21 USPATFULL on STN
 AB 1-Hydrocarboxy substituted hindered amine compounds which also contain a reactive functional group such as hydroxy, amino, oxirane or carboxyl can be chemically attached to selected polymer substrates by condensation reactions to give polymers containing a chemically-bonded, non-migrating stabilizer having excellent stabilization efficacy for protecting said polymer substrate from the adverse effects of actinic light.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 92:74658 USPATFULL
 TI Non-migrating 1-hydrocarboxy hindered amine derivatives as polymer stabilizers
 IN Galbo, James P., Hartsdale, NY, United States
 Ravichandran, Ramanathan, Nanuet, NY, United States
 Schirmann, Peter J., Fairfield, CT, United States
 Mar, Andrew, Norwalk, CT, United States
 PA Ciba-Geigy Company, Ardsley, NY, United States (U.S. corporation)
 PI US 5145893 19920908
 AI US 1990-480173 19900214 (7)
 DCD 20080402
 RLI Continuation-in-part of Ser. No. US 1989-326702, filed on 21 Mar 1989, now abandoned
 DT Utility
 FS Granted
 EXNAM Primary Examiner: Morgan, Kriellion S.
 LREP Hall, Luther A. R.
 CLMN Number of Claims: 17
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 1658
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 IT 132416-44-5 (light stabilizers, nonmigrating, for polymers)
 RN 132416-44-5 USPATFULL
 CN 1,5-Dioxa-9-azaspiro[5.5]undecane-3-methanol, 3,8,8,10,10-pentamethyl-9-(octyloxy) (9CI) (CA INDEX NAME)



L9 ANSWER 12 OF 21 USPATFULL on STN (Continued)



L9 ANSWER 12 OF 21 USPATFULL on STN
 AB Polymers of diallyl 1,3,5-triazino-4-(2,2,6,6-tetramethyl piperidyl) amines are provided, having a molecular weight within the range from about 800 to about 20,000, and derived from the monomer: ##STR1## wherein: R.sub.1 is selected from the group consisting of hydrogen; oxyl; alkyl and hydroxalkyl having from one to about eighteen carbon atoms; alkyaryl having from seven to about eighteen carbon atoms; epoxy alkyl having from three to about eighteen carbon atoms; and acyl having from two to about eighteen carbon atoms;
 epoxy alkyl having from three to about eighteen carbon atoms; and acyl having from two to about eighteen carbon atoms;
 Y is selected from the group consisting of ##STR2## where R.sub.2 and R.sub.3 are hydrogen or alkyl having from one to about eight carbon atoms and n is 0 or 1;
 Z is selected from the group consisting of ##STR3## in which R.sub.4, R.sub.5 and R.sub.6 are selected from the group consisting of hydrogen; alkyl having from one to about eighteen carbon atoms; cycloalkyl having from three to about twelve carbon atoms; and aryl having from six to about thirty carbon atoms; as well as stabilized synthetic resin compositions having an improved resistance to deterioration by light and containing such a polymer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 85:53822 USPATFULL
 TI Diallyl 1,3,5-triazino-4-(2,2,6,6-tetramethyl piperidyl) amines as monomers and polymers and stabilized synthetic resin compositions
 IN Nakahara, Yutaka, Iwatsuki, Japan
 Kimura, Ryoji, Urawa, Japan
 PA Adeka Argus Chemical Co., Ltd., Urawa, Japan (non-U.S. corporation)
 PI US 454028 19850910
 AI US 1983-531147 19830909 (6)
 PRAI JP 1982-159198 19820913
 DT Utility
 FS Granted
 EXNAM Primary Examiner: Kight, John; Assistant Examiner: Morgan, Kriellion
 CLMN Number of Claims: 33
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 1340
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 IT 91263-81-9 (light stabilizers, for polymers)
 RN 91263-81-9 USPATFULL
 CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3-[(di-2-propenylamino)carbonyl]-3,8,8,10,10-pentamethyl-, homopolymer (9CI) (CA INDEX NAME)

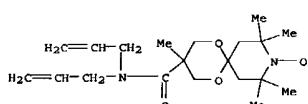
CM 1
 CRN 91263-80-8
 CMF C20 H33 N2 O4

L9 ANSWER 13 OF 21 USPATFULL on STN
 AB Polymers of diallyl 4-(2,2,6,6-tetramethyl piperidyl) amines are provided, having a molecular weight within the range from about 800 to about 20,000, and derived from the monomer ##STR1## wherein: R is selected from the group consisting of hydrogen, oxyl, alkyl and hydroxalkyl having from one to about eighteen carbon atoms; alkyaryl having from seven to about eighteen carbon atoms; epoxy alkyl having from three to about eighteen carbon atoms and acyl having from two to about eighteen carbon atoms, as well as stabilized synthetic resin compositions having an improved resistance to deterioration by light and containing such a polymer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 84:69163 USPATFULL
 TI Diallyl 4-(2,2,6,6-tetramethyl piperidyl) amines as monomers and polymers and stabilized synthetic resin compositions
 IN Nakahara, Yutaka, Iwatsuki, Japan
 Kimura, Ryoji, Urawa, Japan
 PA Adeka Argus Chemical Co., Ltd., Urawa, Japan (non-U.S. corporation)
 PI US 4487900 19841211
 AI US 1983-531149 19830909 (6)
 PRAI JP 1982-159198 19820913
 DT Utility
 FS Granted
 EXNAM Primary Examiner: Welsh, Maurice J.
 CLMN Number of Claims: 21
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 1242
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 IT 91263-81-9 (light stabilizers, for polymers)
 RN 91263-81-9 USPATFULL
 CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3-[(di-2-propenylamino)carbonyl]-3,8,8,10,10-pentamethyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1
 CRN 91263-80-8
 CMF C20 H33 N2 O4



7/6/04

L9 ANSWER 14 OF 21 USPATFULL on STN

AB Polymers of diallyl amino-4-(2,2,6,6-tetramethyl piperidyl) carboxylic acid esters and amides are provided, having a molecular weight within the range from about 800 to about 20,000, and derived from a monomer having the formula: ##STR1## wherein: R is alkylene or alkyleneoxy having from one to about six carbon atoms and m is 0 or 1;

R.sub.1 is selected from the group consisting of hydrogen; oxyl; alkyl and hydroxyalkyl having from one to about eighteen carbon atoms; alkylaryl having from seven to about eighteen carbon atoms; epoxy alkyl having from three to about eighteen carbon atoms; and acyl having from two to about eighteen carbon atoms; and

Y is selected from the group consisting of ##STR2## where R.sub.2 and R.sub.3 are hydrogen or alkyl having from one to about eight carbon atoms and n is 0 or 1;

Z is selected from the group consisting of ##STR3## in which R.sub.4, R.sub.5 and R.sub.6 are selected from the group consisting of hydrogen; alkyl having from one to about eighteen carbon atoms; cycloalkyl having from three to about twelve carbon atoms; and aryl having from six to about thirty carbon atoms; as well as stabilized synthetic resin compositions having an improved resistance to deterioration by light

and containing such a polymer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 84:69150 USPATFULL

TI Diallyl amino-4-(2,2,6,6-tetramethyl piperidyl) carboxylic acid esters and amides as monomers and polymers and stabilized synthetic resin compositions

IN Nakahara, Yutaka, Iwatsuki, Japan

Kimura, Ryoji, Urawa, Japan

PA Adeka Argus Chemical Co., Ltd., Urawa, Japan (non-U.S. corporation)

PI US 4487887 19841011

AI US 1983-531148 19830909 (6)

PRAI JP 1982-159198 19820913

DT Utility

FS Granted

EXNAM Primary Examiner: Welsh, Maurice J.

CLMN Number of Claims: 39

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1349

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 91263-81-9

(light stabilizers, for polymers)

RN 91263-81-9 USPATFULL

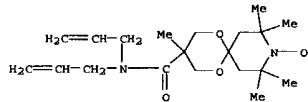
CN 1,5-Dioxa-9-azapiro[5.5]undec-9-yloxy, 3-[(di-2-propenylamino)carbonyl]-3,8,8,10,10-pentamethyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 91263-80-8

CMF C20 H33 N2 O4

L9 ANSWER 14 OF 21 USPATFULL on STN (Continued)



CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 84:69150 USPATFULL

TI Diallyl amino-4-(2,2,6,6-tetramethyl piperidyl) carboxylic acid esters and amides as monomers and polymers and stabilized synthetic resin compositions

IN Nakahara, Yutaka, Iwatsuki, Japan

Kimura, Ryoji, Urawa, Japan

PA Adeka Argus Chemical Co., Ltd., Urawa, Japan (non-U.S. corporation)

PI US 4487887 19841011

AI US 1983-531148 19830909 (6)

PRAI JP 1982-159198 19820913

DT Utility

FS Granted

EXNAM Primary Examiner: Welsh, Maurice J.

CLMN Number of Claims: 39

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1349

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 91263-81-9

(light stabilizers, for polymers)

RN 91263-81-9 USPATFULL

CN 1,5-Dioxa-9-azapiro[5.5]undec-9-yloxy, 3-[(di-2-propenylamino)carbonyl]-3,8,8,10,10-pentamethyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 91263-80-8

CMF C20 H33 N2 O4

L9 ANSWER 15 OF 21 USPATFULL on STN

AB Tetra-2,2,6,6-tetramethyl-4-piperidinyl)-3-methyl-5-(1',2'-biscarboxylate)-ethyl-cyclohexane or 3-cyclohexene-1,2-dicarboxylates are provided having the formula (I) or (II): ##STR1## wherein: R.sub.1 is selected from the group consisting of hydrogen, --O, alkyl, hydroxy alkyl and epoxyalkyl having from one to about eighteen carbon atoms, acyl having from one to about eighteen carbon atoms, cycloalkyl having from three to about eighteen carbon atoms; phenyl; phenalkyl and alkylphenyl having seven to about twenty-four carbon atoms;

R.sub.2 is lower alkyl having from one to about six carbon atoms; and

X is selected from the group consisting of: ##STR2## as well as stabilized synthetic resin compositions comprising such piperidinyl compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 84:58349 USPATFULL

TI Tetra-(2,2,6,6-tetramethyl-4-piperidinyl)-3-methyl-5-(1',2'-biscarboxylate)-ethyl-cyclohexane or 3-cyclohexene-1,2-dicarboxylates and synthetic resin compositions containing the same

IN Minagawa, Motonobu, Kohigaya, Japan

Nakahara, Yutaka, Iwatsuki, Japan

Shibata, Tohishiro, Omiya, Japan

PA Adeka Argus Chemical Co., Ltd., Urawa, Japan (non-U.S. corporation)

PI US 4477616 19841016

AI US 1983-471913 19830303 (6)

PRAI JP 1982-36796 19820309

DT Utility

FS Granted

EXNAM Primary Examiner: Kight, John; Assistant Examiner: Morgan, Kriellion

CLMN Number of Claims: 36

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1196

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

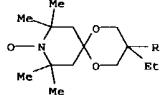
IT 89311-90-0

(light stabilizers, for polymers)

RN 89311-90-0 USPATFULL

CN 1,5-Dioxa-9-azapiro[5.5]undec-9-yloxy, 3,3'-(2-[3,4-bis([(3-ethyl-8,8,10,10-tetramethyl-9-oxy-1,5-dioxa-9-azapiro[5.5]undec-3-yl)methoxy]carbonyl)-5-methylcyclohexyl]-1,4-dioxo-1,4-dioxybutanediyl)bis(oxyethylene)bis[3-ethyl-8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)

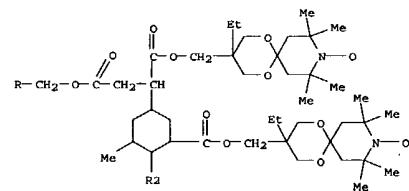
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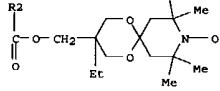
09/844986

L9 ANSWER 15 OF 21 USPATFULL on STN (Continued)

PAGE 2-A



PAGE 3-A



7/6/04

L9 ANSWER 16 OF 21 USPATFULL on STN

AB Polyethers containing 2,2,6,6-tetramethyl piperidinyl carboxylic acid ester or ether groups are provided, comprising polymeric units having the structure ##STR1## wherein X is selected from the group consisting of: ##STR2## R_{sub.1} is selected from the group consisting of hydrogen, -O, alkyl, hydroxy alkyl and epoxyalkyl having from one to about eighteen carbon atoms; acyl having from one to about eighteen carbon atoms; cycloalkyl having from three to about eighteen carbon atoms; phenyl; phenalkyl and alkylphenyl having from seven to about twenty-four carbon atoms;
R_{sub.2} is hydrogen or hydroxy;
n_{sub.1} is 0 or 1;
R_{sub.3} is lower alkyl having from one to about six carbon atoms; and
n is the average number of such units in the polymer; as well as stabilized synthetic resin compositions comprising such polyethers.

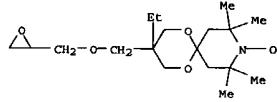
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 84:40146 USPATFULL
TI Polyethers containing 2,2,6,6-tetramethyl piperidinyl carboxylic acid ester groups and synthetic resin compositions
IN Leischner, William E., 1458 Bay Street, Atlantic Beach, NY, United States 11509
Minagawa, Motonobu, 1-207-3 Shichizacho, Koshigaya City, Saitama, Japan
Kubota, Naohiro, 3-105 Ageo Higashi Danchi, 404-1 Ageo-mura, Ageo City, Saitama, Japan
Shibata, Toshihiro, 136-49-3-104 Nara-cho, Omiya City, Saitama, Japan
Arata, Ryozo, 418-1 Shikatebukuro, Urawa City, Saitama, Japan
PI US 4460725 19840717
AI US 1983-472710 19830307 (6)
PRAI JP 1982-36312 19820308
DT UTILITY
FS Granted
EXNAM Primary Examiner: Poelak, Morton; Assistant Examiner: Morgan, Kriellion
CLMN Number of Claims: 25
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1200
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 89096-37-7 89096-58-2
(light stabilizers, nonvolatile, waterproof, for plastics)
RN 89096-37-7 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3-ethyl-8,8,10,10-tetramethyl-3-[(oxiranymethoxy)methyl]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 89096-36-6
CNM C18 H32 N O6

L9 ANSWER 16 OF 21 USPATFULL on STN (Continued)

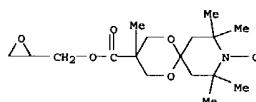


RN 89096-58-2 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,8,8,10,10-pentamethyl-3-[(oxiranymethoxy)carbonyl]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 89096-57-1
CNM C17 H28 N O6

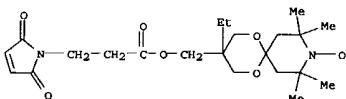


L9 ANSWER 17 OF 21 USPATFULL on STN

AB 2,2,6,6-Tetrasubstituted-4-piperidyl carboxy heterocyclic compounds are provided which are useful as stabilizers for organic polymeric materials.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 83:20827 USPATFULL
TI 2,2,6,6-Tetrasubstituted-4-piperidyl carboxy heterocyclic compounds as stabilizers for synthetic polymers
IN Minagawa, Motonobu, Koshigaya, Japan
Kubota, Naohiro, Urawa, Japan
Shibata, Toshihiro, Teiui Urawa, Japan
PA Adesa Argus Chemical Co., Ltd., Urawa, Japan (non-U.S. corporation)
PI US 3126700 19830531
US 4118369 19781003 (Original)
AI US 1981-325392 19811127 (6)
US 1976-709561 19760728 (Original)
DT Reissued
FS Granted
EXNAM Primary Examiner: Hoke, V. P.
CLMN Number of Claims: 31
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 660
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 68860-00-4 USPATFULL
(light stabilizers, for polymers)
RN 68860-00-4 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3-[(3-(2,5-dihydro-2,5-dioxo-1H-pyrrrol-1-yl)-1-oxopropoxy)methyl]-3-ethyl-8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)



L9 ANSWER 18 OF 21 USPATFULL on STN

AB 2,2,6,6-TETRAMETHYL-4-PIPERIDYL CARBOXYLIC ACID ESTERS OF ALIPHATIC TETRACARBOXYLIC ACIDS ARE PROVIDED, USEFUL AS STABILIZERS FOR ORGANIC POLYMERIC MATERIALS, AND HAVING THE GENERAL FORMULA: ##STR1## wherein: R_{sub.1} is selected from the group consisting of ##STR2## and when a is 2, 3, or 4, the R_{sub.1} groups can be the same or different; R_{sub.2} is selected from the group consisting of hydrogen; alkyl; alkenyl; cycloalkyl; alkycycloalkyl; cycloalkalkyl; aryl; aralkyl; and alkaryl; and when b is 2 or 3, the R_{sub.2} groups can be the same or different; R_{sub.3} is selected from the group consisting of hydrogen and O;
R_{sub.6} is lower alkyl;
A is selected from the group consisting of 1, 2, 3 and 4;
B is selected from the group consisting of 0, 1, 2 and 3;
A + b is equal to 4; and Z is a tetravalent aliphatic or cycloaliphatic radical carrying four ##STR3## WHERE R is R_{sub.1} or R_{sub.2}, and can include from one to three hydroxyl groups OH.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 79:4402 USPATFULL
TI 2,2,6,6-Tetramethyl-4-piperidyl carboxylic acid esters of aliphatic tetracarboxylic acids as stabilizers for synthetic polymers

IN Minagawa, Motonobu, Koshigaya, Japan

Kubota, Naohiro, Urawa, Japan

PA Argus Chemical Corporation, Brooklyn, NY, United States (U.S. corporation)

PI US 4136081 19790123

AI US 1976-736288 19761028 (5)

PRAI JP 1975-139086 19751119

DT UTILITY

FS Granted

EXNAM Primary Examiner: Hoke, V. P.

CLMN Number of Claims: 30

ECL Exemplary Claim: 1,24

DRWN No Drawings

LN.CNT 711

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

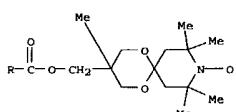
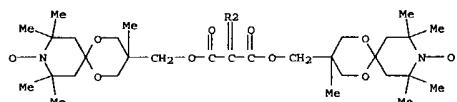
IT 66569-17-3 66569-21-9 69851-59-8
(light stabilizers, for polymers)

RN 66569-17-3 USPATFULL

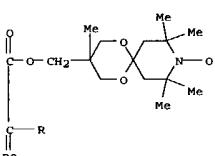
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3'-(1,4-dioxo-2,3-bis[(3,8,8,10,10-pentamethyl-9-oxo-1,5-dioxa-9-azaspiro[5.5]undec-3-

yloxy]carbonyl)-2-butene-1,4-diyl]bis(oxymethylene)]bis(3,8,8,10,10-pentamethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



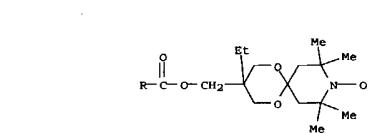
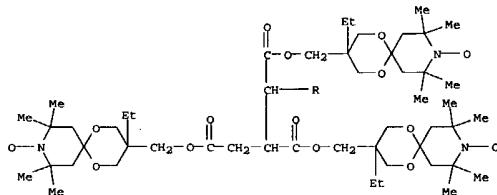
PAGE 2-A



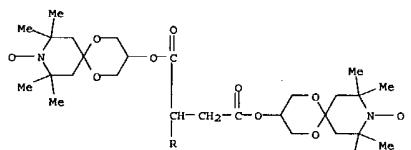
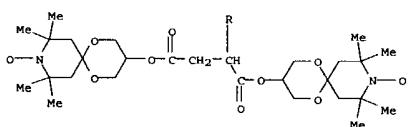
RN 66569-21-9 USPATFULL
 CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3'-(1,4-dioxo-2,3-bis(2-oxo-2-yl)oxyethyl)-1,4-butanediylbis(oxy)bis[8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)

tetramethyl-9-oxy-1,5-dioxa-9-azaspiro[5.5]undec-3-ylmethoxy]carbonyl]-1,5-dioxa-1,5-pentanediylbis(oxyethylene)bis[3-ethyl-8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)

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RN 69851-59-8 USPATFULL
 CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3'-(1,4-dioxo-2,3-bis(2-oxo-2-yl)oxyethyl)-1,4-butanediylbis(oxy)bis[8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)



AB Stabilizer compositions are provided whose ingredients interact synergistically to improve the resistance to deterioration on light exposure and heating of synthetic resin compositions. The interacting ingredients are (a) a carboxylic acid ester of a 2,2,6,6-tetramethylpiperidine-4-alcohol having 15 to 75 carbon atoms and 1 to 4 ester groups, and (b) at least one carbonate ester of an ortho-substituted polyhydric phenol having in the molecule one to three benzene rings, two to three phenolic hydroxyl groups, and in each benzene ring one to two alkyl, cycloalkyl, or aralkyl groups of which at least one is positioned ortho to a phenolic hydroxyl group.

Synthetic resin compositions are provided that are stabilized with the stabilizer compositions disclosed, including olefin polymers, polyamides, acrylic polymers, and vinyl halide polymers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 78:62653 USPATFULL

TI Synthetic resin stabilizer comprising a

2,2,6,6-tetramethylpiperidine-4-

alcohol ester and an oligomeric carbonate

IN Minagawa, Motonobu, Koshigaya, Japan

Kubota, Nachiro, Urawa, Japan

Shibata, Toshihiro, Urawa, Japan

PA Argus Chemical Corporation, Brooklyn, NY, United States (U.S. corporation)

PI US 4124564 19781107

AI US 1977-769890 19770218 (5)

PRAI JP 1976-16793 19760218

DT Utility

FS Granted

EXNAM Primary Examiner: Hoke, V. P.

LREP Kauder, Otto S.

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1070

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

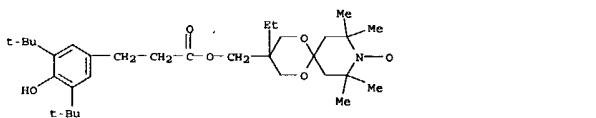
IT 64022-53-3 64022-59-9 (heat and light stabilizers, with phenol oligocarbonates, for PVC)

RN 64022-53-3 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy,

3-[(3-[3,5-bis(1,1-dimethylethyl)-

4-hydroxyphenyl]-1-oxopropoxy)methyl]-3-ethyl-8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)

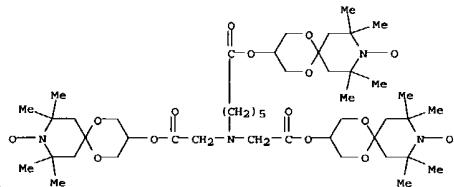


RN 64022-59-9 USPATFULL

CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3'-(1,6-oxo-6-((8,8,10,10-tetramethyl-9-oxo-1,5-dioxa-9-azaspiro[5.5]undec-3-

7/6/04

L9 ANSWER 19 OF 21 USPATFULL on STN (Continued)
yloxy)hexyl)imino[bis[(1-oxo-2,1-ethanediyl)oxy]bis[8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)



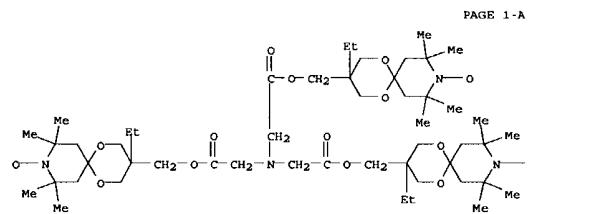
O

IT 64022-58-8
(heat and light stabilizers, with phenol oligocarbonates, for polyethylene)
RN 64022-58-8 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3',3''-[nitrilotris[(1-oxo-2,1-ethanediyl)oxymethylene]]tris[3-ethyl-8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)

L9 ANSWER 19 OF 21 USPATFULL on STN (Continued)

PAGE 1-B

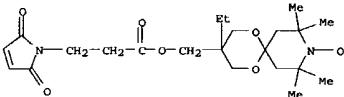
—O



L9 ANSWER 20 OF 21 USPATFULL on STN
AB 2,2,6,6-Tetra substituted-4-piperidyl carboxy heterocyclic compounds are provided which are useful as stabilizers for organic polymeric materials.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 78:56008 USPATFULL
TI 2,2,6,6-Tetra substituted-4-piperidyl carboxy heterocyclic compounds as stabilizers for synthetic polymers
IN Minagawa, Motonobu, Kosigaya, Japan
Kubota, Naohiro, Urawa, Japan
Shibata, Toshihiro, Tsuji Urawa, Japan
PA Argus Chemical Corporation, Brooklyn, NY, United States (U.S. corporation)
PI US 4118369 19781003
AI US 1976-709561 19760728 (5)
DT Utility
PS Granted
EXAM Primary Examiner: Hoke, V. P.
CLMN Number of Claims: 30
ECL Exemplary Claim: 1,21
DRWN No Drawings
LN.CNT 640
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 68860-00-4
(light stabilizers, for polymers)
RN 68860-00-4 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3-[(3-(2,5-dihydro-2,5-dioxo-1H-pyrol-1-yl)-1-oxopropoxy)methyl]-3-ethyl-8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)



L9 ANSWER 21 OF 21 USPATFULL on STN

AB Stabilizers for organic polymeric materials are provided, comprising a triphosphite, an acid phosphite, and a 2,2,6,6-tetramethyl-4-piperidyl carboxylic acid ester having the general formula: ##STR1## wherein: R_{sub.1} is selected from the group consisting of hydrogen and O; R_{sub.6} is lower alkyl having from one to six carbon atoms;

n is selected from the group consisting of 1, 2, 3 and 4; and

Z is an organic radical having a valence from 1 to 4, the valence positions being taken by ##STR3## groups, and from one to about 20 carbon atoms, and selected from the group consisting of alkyl, alkenyl, alkylene, alkenylene, alkylidene; aryl, arylene, aralkyl, aralkylene, aralkylidene, alkaryl, alkarylene, alkarylidene; heterocycloalkyl, heterocycloalkylene, heterocycloalkylidene; cycloalkyl, cycloalkenyl, cycloalkylidene, cycloalkylene, cycloalkylidene, alkycycloalkyl, alkycycloalkenyl, alkycycloalkylene, alkycycloalkylidene, cycloalkalkenyl, cycloalkalkylene, and amino- and hydroxy-substituted such radicals.

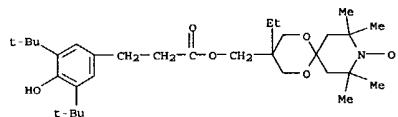
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 78:47261 USPATFULL
TI Stabilizers for synthetic polymers comprising 2,2,6,6-tetramethyl-4-piperidyl carboxylic acid ester, a triphosphite, and an acid phosphite or salt thereof
IN Minagawa, Motonobu, Kosigaya, Japan
Kubota, Naohiro, Urawa, Japan
Shibata, Toshihiro, Urawa, Japan
PA Argus Chemical Corporation, Brooklyn, NY, United States (U.S. corporation)
PI US 4110306 19780829
AI US 1976-744053 19761122 (5)
PRAI JP 1975-144357 19751201
DT Utility
PS Granted
EXAM Primary Examiner: Hoke, V. P.
CLMN Number of Claims: 30
ECL Exemplary Claim: 1,21
DRWN No Drawings
LN.CNT 1170
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 64022-53-3 64022-58-8 64022-59-9
(heat and light stabilizers, for polymers)
RN 64022-53-3 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3-[(3-[3,5-bis(1,1-dimethyl ethyl)-4-hydroxyphenyl]-1-oxopropoxy)methyl]-3-ethyl-8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)

09/844986

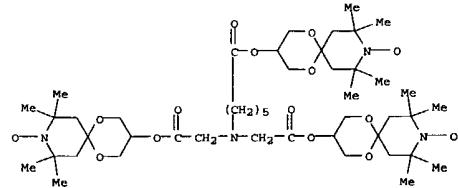
7/6/04

L9 ANSWER 21 OF 21 USPATFULL on STN (Continued)

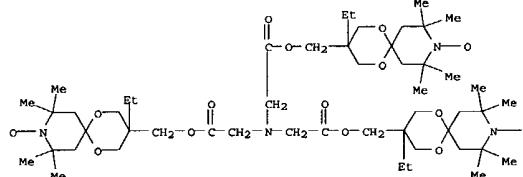


RN 64022-58-8 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3',3''-[nitrilotri(1-oxo-2,1-ethanediyl)oxymethylene]trio[3-ethyl-8,8,10-tetramethyl- (9CI) (CA INDEX NAME)

L9 ANSWER 21 OF 21 USPATFULL on STN (Continued)



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PAGE 1-B

—o

RN 64022-59-9 USPATFULL
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3'-{[[6-oxo-6-[(8,8,10,10-tetramethyl-9-oxy-1,5-dioxa-9-azaspiro[5.5]undec-3-yloxy)hexyl]imino]bis[(1-oxo-2,1-ethanediyl)oxy]]bis[8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)

09/844986

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=> d his

(FILE 'HOME' ENTERED AT 09:43:51 ON 06 JUL 2004)

FILE 'REGISTRY' ENTERED AT 09:43:59 ON 06 JUL 2004
L1 STRUCTURE UPLOADED

L2 44 S L1
L3 859 S L1 FUL

FILE 'CAPLUS' ENTERED AT 09:44:28 ON 06 JUL 2004
L4 182 S L3

FILE 'REGISTRY' ENTERED AT 09:46:20 ON 06 JUL 2004
L5 STRUCTURE UPLOADED
L6 13 S L5
L7 187 S L5 FUL

FILE 'CAPLUS' ENTERED AT 09:46:52 ON 06 JUL 2004
L8 47 S L7

FILE 'USPATFULL, USPAT2' ENTERED AT 09:50:59 ON 06 JUL 2004
L9 21 S L7

=> s 18 not 19

L10 0 L8 NOT L9

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	143.30	498.93
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-5.88

FILE 'CAPLUS' ENTERED AT 09:58:30 ON 06 JUL 2004

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 6 Jul 2004 VOL 141 ISS 2
FILE LAST UPDATED: 5 Jul 2004 (20040705/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

7/6/04

```
=> s 18 not 19
        47 L7
L11      0 L8 NOT L9
```

```
=> rem dup 18 and 19
DUP IS NOT VALID HERE
AND IS NOT VALID HERE
L9 IS NOT VALID HERE
```

The DELETE command is used to remove various items stored by the system.

To delete a saved query, saved answer set, saved L-number list, SDI request, batch request, mailing list, or user-defined cluster, format, or search field, enter the name. The name may include ? for left, right, or simultaneous left and right truncation.

Examples:

DELETE BIO?/Q	- delete query names starting with BIO
DELETE ?DRUG/A	- delete answer set names ending with DRUG
DELETE ?ELEC?/L	- delete L-number lists containing ELEC
DELETE ANTICOAG/S	- delete SDI request
DELETE ENZYME/B	- delete batch request
DELETE .MYCLUSTER	- delete user-defined cluster
DELETE .MYFORMAT	- delete user-defined display format
DELETE .MYFIELD	- delete user-defined search field
DELETE NAMELIST MYLIST	- delete mailing list

To delete an ordered document or an offline print, enter its number.

Examples:

DELETE P123001C	- delete print request
DELETE D134002C	- delete document order request

To delete an individual L-number or range of L-numbers, enter the L-number or L-number range. You may also enter DELETE LAST followed by a number, n, to delete the last n L-numbers. RENUMBER or NORENUMBER may also be explicitly specified to override the value of SET RENUMBER.

Examples:

DELETE L21	- delete a single L-number
DELETE L3-L6	- delete a range of L-numbers
DELETE LAST 4	- delete the last 4 L-numbers
DELETE L33-	- delete L33 and any higher L-number
DELETE -L55	- delete L55 and any lower L-number
DELETE L2-L6 RENUMBER	- delete a range of L-numbers and renumber remaining L-numbers
DELETE RENUMBER	- renumber L-numbers after deletion of intermediate L-numbers

Entire sets of saved items, SDI requests, batch requests, user-defined items, or E-numbers can be deleted.

7/6/04

Examples:

```
DELETE SAVED/Q - delete all saved queries
DELETE SAVED/A - delete all saved answer sets
DELETE SAVED/L - delete all saved L-number lists
DELETE SAVED    - delete all saved queries, answer sets,
                  and L-number lists
DELETE SAVED/S - delete all SDI requests
DELETE SAVED/B - delete all batch requests
DELETE CLUSTER - delete all user-defined clusters
DELETE FORMAT  - delete all user-defined display formats
DELETE FIELD   - delete all user-defined search fields
DELETE SELECT  - delete all E-numbers
DELETE HISTORY - delete all L-numbers and restart the
                  session at L1
```

To delete an entire multifile SDI request, enter DELETE and the name of the request. To delete a component from the multifile SDI, enter DELETE and the name of the component.

```
=> s 18
L12      47 L7

=> s 112 not 19
      47 L7
L13      0 L12 NOT L9

=> d 112 1-20 fhitstr abs bib
```

7/6/04

L12 ANSWER 1 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN

IT 673808-70-1P

RL: IMP (Industrial manufacture); PREP (Preparation)
(comb: preparation of comb or star polymers using epoxy-functionalized nitroxyl ethers)

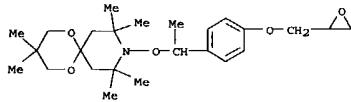
RN 671808-70-1 CAPLUS

CN 2-Propenenitrile, polymer with ethenylbenzene and
3,3,8,8,10,10-hexamethyl-

9-[1-[4-(oxiranylmethoxy)phenyl]ethoxy]-1,5-dioxa-9-azaspiro[5.5]undecane,
graft (9CI) (CA INDEX NAME)

CM 1

CRN 434898-80-3
CMP C25 H39 N 05



CM 2

CRN 107-13-1
CMP C3 H3 N

$\text{H}_2\text{C}=\text{CH}-\text{C}\equiv\text{N}$

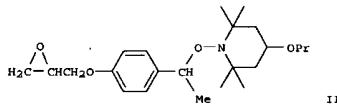
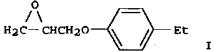
CM 3

CRN 100-42-5
CMP C8 H8

$\text{H}_2\text{C}=\text{CH}-\text{Ph}$

GI

L12 ANSWER 1 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



AB A comb or star polymer, which has side chains differing in polarity and chemical structure from the backbone, is formed by polymerizing one or more epoxy containing monomers to receive a polyether with pending nitroxyl ether groups, followed by copolymerization with at least one ethylenically unsatd. monomer, such as styrene and Me acrylate, under controlled radical conditions to receive comb or star polymers. Thus, epoxy-functionalized monomers, (I) and (II), were polymerized in the presence of potassium-tert-butylate in toluene, followed by copolymerization with styrene to receive a comb graft copolymer.

AN 2004:220377 CAPLUS

DN 140:271713

TI Preparation of comb or star polymers using epoxy-functionalized nitroxyl ethers and its applications

IN Wunderlich, Wiebke; Pfleiderer, Rudolf; Fusco, Francesco; Pink, Jochen

PA Ciba Specialty Chemicals Holding Inc., Switz.

SO PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DT Patent

LA English

PAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004022617 A1	20040318	WO 2003-EP9410	20030826	
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, PR, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG				

PRAI EP 2002-405763 A 20020904

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

L12 ANSWER 1 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN
ALL CITATIONS AVAILABLE IN THE RE FORMAT

(Continued)

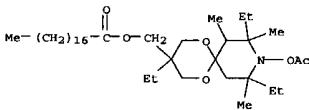
L12 ANSWER 2 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN

IT 376588-17-9

RL: MON (Modifier or additive use); USES (Uses)
(flame retardant; flame retardant polymer compns. containing hydroxylamine esters)

RN 376588-17-9 CAPLUS

CN Octadecanoic acid, [9-(acetoxy)-3,8,10-triethyl-7,8,10-trimethyl-1,5-dioxa-9-azaspiro[5.5]undec-3-yl]methyl ester (9CI) (CA INDEX NAME)



AB The instant invention pertains to a thermoplastic organic polymer (e.g., polytetraene) containing a conventional flame retardant (e.g., antimony oxide)

and a hydroxylamine ester, in particular a tetraalkyl piperidine hydroxylamine ester. Further aspects of the invention are the use of hydroxylamine esters as flame retardants and a method for improving flame retardancy of a thermoplastic organic polymer.

AN 2003:834231 CAPLUS

DN 139:324231

TI Flame retardant polymer compositions containing hydroxylamine esters

IN Roth, Michael; Simon, Dirk; Leslie, Grant; Nevarda, Peter; King, Roswell

Easton; Kaprinidis, Nikolaos

PA Ciba Specialty Chemicals Holding Inc., Switz.

SO PCT Int. Appl., 73 pp.

CODEN: PIXXD2

DT Patent

LA English

PAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003087211 A2	20031023	WO 2003-EP3726	20030410	
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TC, TD				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, PR, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG				

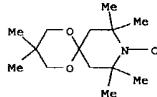
PRAI EP 2002-405310 A 20020417

OS MARPAT 139:324231

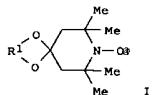
09/844986

7/6/04

L12 ANSWER 3 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN
 IT 98254-32-1DP, reaction product with polymer
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
 (synthetic resin composition containing piperidine-added polymeric stabilizer
 for agricultural film)
 RN 98254-32-1 CAPLUS
 CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3,8,8,10,10-hexamethyl- (9CI)
 (CA INDEX NAME)

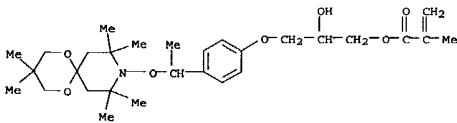


GI

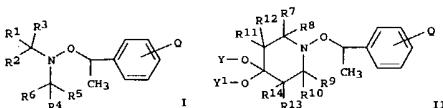


AB The composition contains a synthetic resin and a stabilizer obtained by addition reaction of a piperidine ketal I (R1 = C1-20 polyalc. residue after removal of 2 OH) and a polymer having mol. weight \geq 300, which is useful for an agricultural film showing retention of weatherability in processing at high temperature, under fumigation by S, or under acid rain.
 Thus, 100 parts LDPE (Hiway NL 100) and 10.2 parts N-oxyl-2,2,6,6-tetramethylpiperidin-4-one 2,2-dimethyl-1,3-propanediol ketal were reacted in the presence of α,α' -bis(tert-butylperoxy)diisopropylbenzene to give the polymeric stabilizer, 2.5 parts of which was mixed with LDPE (YK 30) 100, tetrakis[methylene-3-(3,5-di(tert-butyl)-4-hydroxyphenyl)propionate]methane 0.05, and triis[2,4-di(tert-butyl)phenyl]phosphite 0.5 part and extruded to give a test piece. Then, the test piece was fumigated by S for 1 h and subjected to sunshine weather-o-meter to show carbonyl index 0.02 after 120 h and 0.75 after 1200 h.
 AN 2003-793696 CAPLUS
 DN 139:292944
 TI Synthetic resin composition containing piperidine-added polymeric

L12 ANSWER 4 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN
 IT 602280-33-1P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation);
 RACT (Reactant or reagent)
 (monomer; for nitroxyl-containing polymeric initiator for radical polymerization providing graft or block copolymer)
 RN 602280-33-1 CAPLUS
 CN 2-Propenoic acid, 2-methyl-, 3-[4-[(1-[(3,3,8,8,10,10-hexamethyl-1,5-dioxa-9-azaspiro[5.5]undec-9-yloxyethyl)phenoxy]-2-hydroxypropyl ester (9CI)
 (CA INDEX NAME)



GI



AB The polymerization initiator is a vinyl polymer substituted with nitroxyl group
 I or II [R1-R5, R7-R10 = linear or branched alkyl; R3, R6, R11-R14 = H, linear or branched alkyl; Y and Y1 form CR15R16CR17R18 or CR19R20CR21R22CR23R24; R15-R24 = H, alkyl, carboxyl, alkoxy, acyloxy, Q = $\text{OCH}_2\text{CH}(\text{OH})\text{CH}_3$], which contains vinyl polymer except for polymers obtained by reaction of an epoxy compound and a carboanion (A) as a result of anionic polymerization of a vinyl monomer. The nitroxyl group is further defined that chain lengths of R1-R5 and R7-R10 contribute to reduction of steric hindrance and bonding energy in bond formation between the initiator-derived nitroxyl radical and a radically polymerizable monomer radical. The initiator is manufactured by reaction of a vinyl polymer substituted with epoxy group reactive functional group, except for the above carboanion A, and an epoxy compound I or II ($\text{O}=\text{C}(\text{CH}_2\text{CH}_2\text{O})\text{CH}_2\text{C}=\text{O}$). A graft or block copolymer is manufactured by polymerization of a radically polymerizable monomer in the presence of the initiator under heat. Thus, 5 g 98.4:1.6 (mol) Me methacrylate (III)-methacrylic acid copolymer was

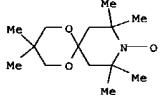
09/844986

L12 ANSWER 3 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 stabilizer
 IN Negishi, Yoshinori; Tobita, Etsuo
 PA Asahi Denka Kogyo K. K., Japan
 SO Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 P.A.N. CNT 1
 PATENT NO. KIND DATE APPLICATION NO. DATE
 PI JP 2003286412 A2 20031010 JP 2002-93049 20020328
 PRAI JP 2002-93049 20020328
 OS MARPAT 139:292944

L12 ANSWER 4 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 esterified with 0.4 g 3,3,8,8,10,10-hexamethyl-9-[(1-oxiranylmethoxyphenyl)ethoxy]-1,5-dioxa-9-azaspiro[5.5]undecane at 80° for 8 h to give an reactive initiator. Then, 3 g Bu acrylate (IV) was polymd. in the presence of 1 g of the initiator at 130° for 10 h to give III-IV graft copolymer.
 AN 2003-750737 CAPLUS
 DN 139:261761
 TI Polymeric initiator for radical polymerization, manufacture of the initiator, and manufacture of graft or block polymer
 IN Ogami, Nobuko; Tokunaga, Eiko; Makino, Takayuki
 PA Mitsubishi Rayon Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 16 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 P.A.N. CNT 1
 PATENT NO. KIND DATE APPLICATION NO. DATE
 PI JP 2003268027 A2 20030925 JP 2002-76766 20020319
 PRAI JP 2002-76766 20020319

7/6/04

L12 ANSWER 5 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN
 IT 98254-33-1
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of stabilizer for color photog. recording material)
 RN 98254-32-1 CAPLUS
 CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3,8,8,10,10-hexamethyl- (9CI)
 (CA INDEX NAME)



AB A color photog. material contains on a support at least one blue-sensitive silver halide emulsion layer containing at least one yellow coupler, at least one green-sensitive silver halide emulsion layer containing at least one magenta coupler, at least one red-sensitive silver halide emulsion layer containing at least one cyan coupler, together with customary non-light-sensitive layers, characterized in that at least one layer contains a compound of (R1)3CNOR3(R1)3 (R1,2 = methyl; R3 = -CH(CH3)-X-D; X = -O-phenylene; D = -O-CH2-CH(OH)-CH2-N(R12)-CH2-CHOH-CH2-O-, W = divalent amino group (-N(C1-C18 alkyl)-), polyamine residue, polyethyleneimine residue, polyoxazalkyleneamino residue; Z and Z' = C1-C12alkyl, C3-C12 alkenyl, C5-C8 cycloalkyl, etc.).

AN 2003:719722 CAPLUS
 DN 139:237619

TI Colour photographic recording material
 IN Biry, Stephane; Russo, Francesco; Kramer, Andreas
 PA Ciba Specialty Chemicals Holding Inc., Switz.
 SO PCT Int. Appl., 84 pp.
 CODEN: PIXXD2

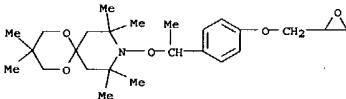
DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003075091	A1	20030912	WO 2003-EP1898	20030225
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, ES, FI, GE, GD, GB, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, QQ, GW,				

L12 ANSWER 6 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN
 IT 434898-80-3P
 RL: IMP (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
 (process for synthesis of hindered amine ethers from secondary amino oxides)
 RN 434898-80-3 CAPLUS
 CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 3,3,8,8,10,10-hexamethyl-9-[1-(oxiranylmethoxy)phenyl]ethoxy- (9CI) (CA INDEX NAME)



AB Amine ethers of sterically hindered amines are obtained in good yield from the corresponding N-oxyl hindered amine precursor by reaction with a hydrocarbon in the presence of an organic hydroperoxide and an iodide. The products of present process find utility as polymerization regulators and/or light stabilizers for organic material. Thus, adding tert-Bu hydroperoxide (i.e. 70% aqueous solution) 6.2 to a stirred mixture of 2,2,6,6-tetramethylpiperidine-N-oxide (TEMPO), 5, ethylbenzene 34 and tetrabutylammonium iodide 0.12 g within 30 min heating at 60° for 25 min until all of the TEMPO has reacted, cooling to 25°, stirring with 10% aqueous solution of Na2S03 until the disappearance of excess I, separating the aqueous phase, washing and drying over MgSO4 gave 1-(1-phenylethoxy)-2,2,6,6-tetramethylpiperidine.

AN 2003:434535 CAPLUS
 DN 139:22821

TI Process for the synthesis of hindered amine ethers from secondary amino oxides
 IN Frey, Markus; Rast, Valerie
 PA Ciba Specialty Chemicals Holding Inc., Switz.
 SO PCT Int. Appl., 56 pp.
 CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003045919	A2	20030605	WO 2003-EP12957	20021119
WO 2003045919	A3	20040429		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, ES, FI, GR, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,				

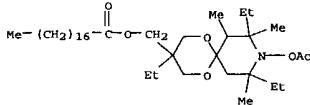
09/844986

L12 ANSWER 5 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 ML, MR, NE, SN, TD, TG
 PRAI EP 2002-405167 A 20020305
 OS MARPAT 139:237619
 RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 6 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, QQ, GW, ML, MR, NE, SN, TD, TG
 PRAI EP 2001-811143 A 20011126
 OS MARPAT 139:22821

L12 ANSWER 7 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN

IT 376588-17-9
 RL: CAT (Catalyst use); USES (Uses)
 (unsatd. polyester crosslinking by the use of hydroxylamine ester initiators)
 RN 376588-17-9 CAPLUS
 CN Octadecanoic acid, [9-(acetoxy)-3,8,10-triethyl-7,8,10-trimethyl-1,5-dioxa-9-azaspiro[5.5]undec-3-yl]methyl ester (9CI) (CA INDEX NAME)



AB Crosslinking unsatd. polymer resins such as unsatd. polyesters uses hydroxylamine esters as radical source. A composition comprises unsatd. polymer resin such as Palapreg P 17-02 19, EVA 19, chalk 45, glass fiber mat 15, Zinkum PZ 1.7, MgO 0.1, and a hydroxylamine ester 0.3% for crosslinking unsatd. polyesters to a Shore D hardness 77.

AN 2003:282641 CAPLUS

DN 138:305053

TI Crosslinking of unsaturated polymers by the use of hydroxylamine-esters, and compositions

IN Roth, Michael; Simon, Dirk

PA Ciba Specialty Chemicals Holding Inc., Switz.

SO PCT Int. Appl., 66 pp.

CODEN: PIXX02

DT Patent

LA English

PAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

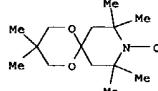
PI WO 2003029332 A1 20030410 WO 2002-EP10403 20020917
 W: AB, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
 UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
 RU, TJ, TR
 RW: GH, KE, LS, MW, MZ, SD, SL, S2, TZ, UG, ZM, ZW, AT, BE, BG,
 CH, CY, CZ, DE, DK, EE, ES, FI, FR, GR, IE, IT, LU, MC, NL,
 PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR,
 NE, SN, TD, TG

PRAI EP 2001-810933 A 20010925

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 8 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN

IT 98254-32-1
 RL: CAT (Catalyst use); NUU (Other use, unclassified); USRS (Uses)
 (cellulose fiber treated with; making carboxylated cellulose fibers
 for
 papermaking)
 RN 98254-32-1 CAPLUS
 CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3,8,8,10,10-hexamethyl- (9CI) (CA INDEX NAME)



AB The title method of making carboxylated cellulose fibers whose fiber strength and d.p. is not significantly sacrificed comprises oxidation and stabilized stages. The title method involves the use of cyclic nitroxide free radical compds. as a primary oxidant and a hypohalite salt as a secondary oxidant in an aqueous environment. Preferably the oxidized cellulose is then stabilized against D.P. loss in alkaline environments and
 color reversal with a reducing agent such as Na borohydride. Alternatively it may be treated with an tertiary oxidant such as Na chlorite. The method results in a high percentage of carboxyl groups located at the fiber surface. The product is especially useful as a papermaking fiber where it contributes strength and has a higher attraction for cationic additives. The product is also useful as an additive to recycled

fiber to increase strength. The method can be used to improve properties of either virgin or recycled fiber. It does not require high α -cellulose fiber but is suitable for regular market pulps.

AN 2003:150421 CAPLUS

DN 138:172129

TI Making carboxylated cellulose fibers and paper products

IN Jewell, Richard A.; Komen, Joseph Lincoln; Su, Bing; Weerawarna, S.

Ananda; Li, Yong

PA Weyerhaeuser Company, USA

SO 23 pp., Cont.-in-part of U.S. 6,379,494.

CODEN: USXXAM

DT Patent

LA English

PAN.CNT 3

PATENT NO. KIND DATE APPLICATION NO. DATE

PI US 6524348 B1 20030225 US 2000-641276 20000817
 US 6379494 B1 20020430

PRAI US 1999-272137 B2 19990319

US 1999-418909 A2 19991015

OS MARPAT 138:172129

L12 ANSWER 9 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN

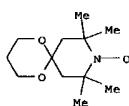
IT 482641-70-3P
 RL: CAT (Catalyst use); IMF (Industrial manufacture); MOA (Modifier or additive use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
 (hindered spiro-ketal nitroxide polymerization inhibitors for vinyl

and
 acrylate monomers)

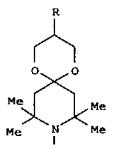
RN 482641-70-3 CAPLUS

CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)

PAN.CNT 1



OI



AB Hindered spiro-ketal nitroxides (I; R = hydrogen, Me, Et, 1-Pr, 2-Pr, 1-Bu, iso-Bu, 1-methylpropyl; e.g., 1,5-dioxa-9-aza-8,8,10,10-tetramethylspiro[5.5]undec-9-yloxy), prepared by the oxidation (i.e., with aqueous hydrogen peroxide) of the corresponding ketals (e.g., 1,5-dioxa-9-aza-8,8,10,10-tetramethylspiro[5.5]undecane), are capable of inhibiting vinyl

with aqueous hydrogen peroxide) of the corresponding ketals (e.g., 1,5-dioxa-9-aza-8,8,10,10-tetramethylspiro[5.5]undecane), are capable of inhibiting vinyl

and acrylate (e.g., Me acrylate) monomer polymerization

AN 2003:23554 CAPLUS

DN 138:90637

TI Hindered spiro-ketal nitroxide polymerization inhibitor for vinyl and

acrylate monomers

IN Jaworski, Mikolaj; Clumpner, J. Michael; O'Lenick, Anthony J.

PA USA

SO U.S. Pat. Appl. Publ., 4 pp.

CODEN: USXXCO

DT Patent

LA English

PAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

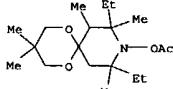
PI US 2003009031 A1 20030109 US 2001-844986 20010430

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L12 ANSWER 9 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN
PRAI US 2001-844986 20010430

(Continued)

L12 ANSWER 10 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN
IT 376588-13-5
RL: CNT (catalyst use); USES (Uses)
(method of grafting ethylenically unsatd. carboxylic acid derivs. onto
thermoplastic polymer using hydroxylamine esters)
RN 376588-13-5 CAPLUS
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 9-(acetoxy)-8,10-diethyl-3,7,8,10-
pentamethyl- (9CI) (CA INDEX NAME)

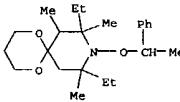


AB The method comprises heating a mixture of thermoplastic polymer and
unsatd. carboxylic acid or carboxylic acid derivative in the presence of
hydroxylamine ester of mono- or dicarboxylic acid of specific structure as initiator in
a processing apparatus for thermoplastic polymers, to above the softening
point/m.p. of the thermoplastic polymer. Thus, heating Profax 6501
(isotactic polypropylene) with 10% maleic anhydride in the presence of
2.0% acetic acid 4-acetoxy-2,6-diethyl-2,3,6-trimethylpiperidin-1-yl
ester
at 220° in extruder gave a graft copolymer.
AN 2002-888787 CAPLUS
DN 137-385237
TI Method of grafting ethylenically unsaturated carboxylic acid derivatives
onto thermoplastic polymers using hydroxylamine esters
IN Pink, Jochen; Roth, Michael; Pfaendner, Rudolf; Nesvadba, Peter; Kramer,
Andreas
PA Ciba Specialty Chemicals Holding Inc., Switz.
SO PCT Int. Appl., 72 pp.
CODEN: PIXXD2
DT Patent
LA English
PAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 200202653 A1 20021121 WO 2002-EP5037 20020507
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
BP, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG
EP 1404729 A1 20040407 EP 2002-742962 20020507
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

L12 ANSWER 10 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
PRAI CH 2001-091 A 20010515
WO 2002-EP5037 W 20020507
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 11 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN
IT 437745-78-3
RL: CNT (catalyst use); USES (Uses)
(N-alkoxy-4,4-dioxy-polyalkyl-piperidines, their N-oxides and
controlled radical polymerization therewith)
RN 437745-78-3 CAPLUS
CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 8,10-diethyl-7,8,10-trimethyl-9-(1-
phenylethoxy)- (9CI) (CA INDEX NAME)



AB Controlled (block) polymerization of unsatd. monomers is carried out in
the presence of selected 1-alkoxy-2,2,6,6-tetramethylpiperidine,
1-alkoxy-2,2-diethyl-6,6-dimethylpiperidine, and/or 1-alkoxy-2,6-diethyl-
2,3,6-trimethylpiperidine derivs. which are substituted in the 4-position
by two oxygen atoms forming an open chain or cyclic ketal structure to
prepare polymers with low polydispersity. Thus, polymerization of 117
mmol Bu
acrylate in the presence of 1.78 mmol 7,9-diethyl-6,7,9-trimethyl-8-(1-
phenyl ethoxy)-1,4-dioxa-8-aza-spiro[4.5]decane at 145° for 5 h
gave 74% of a polymer with Mw 8280, Mn 6460, and Mw/Mn 1.28.
AN 2002-466059 CAPLUS
DN 137-33695
TI N-alkoxy-4,4-dioxy-polyalkyl-piperidine compounds, their corresponding
N-oxides and controlled radical polymerization therewith
IN Nesvadba, Peter; Zink, Marie Odile; Wunderlich, Wiebke
PA Ciba Specialty Chemicals Holding Inc., Switz.
SO PCT Int. Appl., 87 pp.
CODEN: PIXXD2
DT Patent
LA English
PAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

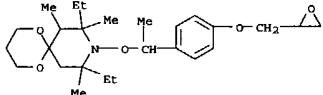
PI WO 2002048205 A1 20020620 WO 2001-EP13072 20011112
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TR, TT, TZ, UA,
UG, US, UZ, VN, YU, ZA, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BP,
BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG
AU 2002024841 A5 20020621 AU 2002-24841 20011112
EP 1343827 A1 20030917 EP 2001-994649 20011112
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
US 2004082742 A1 20040429 US 2003-450229 20030611
PRAI EP 2000-811190 A 20001214
WO 2001-EP13072 W 20011112

09/844986

7/6/04

L12 ANSWER 11 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 OS MARPAT 137:33695
 RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 12 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN
 IT 437993-46-9
 RL: CAT (Catalyst use); USES (Uses)
 (N-alkoxy-4,4-dioxy-polyalkyl-piperidine nitroxides containing
 glycidyl or
 alkylcarbonyl groups as functional initiators for controlled radical
 polymerization)
 RN 437993-46-9 CAPLUS
 CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 8,10-diethyl-7,8,10-trimethyl-9-[1-[4-
 (oxiranymethoxy)phenyl]ethoxy]- (9CI) (CA INDEX NAME)

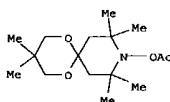


AB Controlled (block) polymerization of unsatd. monomers is carried out in the presence of selected glycidyl- or carbonyl-functional N-alkoxy-4,4-dioxy-polyalkyl-piperidine nitroxides having an open chain or cyclic ketal structure to prepare polymers with low polydispersity. Thus, polymerization of Bu acrylate in the presence of 0.1 mol% [1-(4-oxiranymethoxy phenyl)-ethoxy]-1,5-dioxa-9-aza-spiro[5.5]undecane at 130° for 6 h gave a polymer with Mw 72,870, Mn 57,120, and Mw/Mn 1.28.
 AN 2002:465975 CAPLUS
 DN 137:47610
 TI N-alkoxy-4,4-dioxy-polyalkyl-piperidine compounds with glycidyl or alkylcarbonyl groups as functional initiators for controlled radical polymerization
 IN Fuso, Francesco; Wunderlich, Wiebke; Kramer, Andreas; Fink, Jochen
 PA Ciba Specialty Chemicals Holding Inc., Switz.
 SO PCT Int. Appl., 83 pp.
 CODEN PIIXD2
 DT Patent
 LA English
 PAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002048109	A2	20020620	WO 2001-EP13071	20011112
WO 2002048109	C1	20030410		
WO 2002048109	A3	20020829		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, PR, GB, GR, IR, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TU				

L12 ANSWER 12 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG
 AU 2002024840 A5 20020624 AU 2002-24840 20011112
 EP 1341763 A2 20030910 EP 2001-994648 20011112
 EP 1341763 B1 20040616
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 BR 2001016204 A 20031223 BR 2001-16204 20011112
 JP 2004515540 T2 20040527 JP 2002-549640 20011112
 US 2004049043 A1 20040311 US 2003-450227 20030611
 PRAI EP 2000-811191 A 20001214
 WO 2001-EP13071 W 20011112
 OS MARPAT 137:47610

L12 ANSWER 13 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN
 IT 376588-09-9P
 RL: CAT (Catalyst use); IMP (Industrial manufacture); PREP (Preparation); USES (Uses)
 (hydroxylamine ester as polymerization initiators and controlling degradation and mol. weight of polymers)
 RN 376588-09-9 CAPLUS
 CN 1,5-Dioxa-9-azaspiro[5.5]undecane, 9-(acetoxyloxy)-3,3,8,10-hexamethyl- (9CI) (CA INDEX NAME)



AB The invention relates to novel cyclic and open-chain hydroxylamine esters and polymerizable compns. comprising these hydroxylamine esters and an ethylenically unsatd. monomer or oligomer. The invention also relates to use as polymerization initiators and to the use of known hydroxylamine esters and the novel hydroxylamine esters for the controlled degradation of polypropylene and for achieving a controlled increase in the mol. weight of polyethylene.
 AN 2001:868459 CAPLUS
 DN 136:6539
 TI Hydroxylamine esters as polymerization initiators
 IN Roth, Michael; Pfaendner, Rudolf; Nesvadba, Peter; Zink, Marie-Odile
 PA Ciba Specialty Chemicals Holding Inc., Switz.
 SO PCT Int. Appl., 114 pp.
 CODEN: PIIXD2
 DT Patent
 LA English

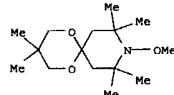
PAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001090113	A1	20011129	WO 2001-EP5447	20010514
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, PR, GB, GR, IR, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TU				
BR 2001010854	A	20030211	BR 2001-10854	20010514
EP 1282630	A1	20030212	EP 2001-931694	20010514
R: AT, BE, CH, DE, DK, ES, PR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003534347	T2	20031118	JP 2001-586300	20010514
US 2003216494	A1	20031120	US 2002-275495	20021105
NO 2002005532	A	20030106	NO 2002-5532	20021118

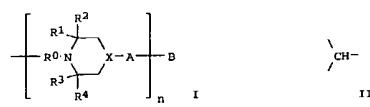
7/6/04

L12 ANSWER 13 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 PRAI EP 2000-810443 A 20000519
 WO 2001-EP5447 W 20010514
 OS MARPAT 135:6539
 RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 14 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN
 IT 351331-35-6
 RL: MOA (Modifier or additive use); USES (Uses)
 (fire resistant additives for electrolyte solns. in secondary lithium
 batteries)
 RN 351331-35-6 CAPLUS
 CN 1,5-Dioxa-9-azapiro[5.5]undecane, 9-methoxy-3,3,8,8,10,10-hexamethyl-
 (9CI) (CA INDEX NAME)



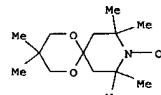
GI



AB The electrolyte solns. contain an electrolyte salt dissolved in an organic solvent, which contains a piperidine derivative I, where R0 = C1-18 alkyl group; R1-4 = C1-4 alkyl groups; n = 1-6 integer; X = II or III; R = C2-10 alkenyl group, A = -O-, -NR5- or a single bond; R5 = C1-10 alkyl group; B = H or C1-10 alkyl group that may also have ether bonding, n-valent acyl group or carbamoyl group, -CO2(R6COO)mk7 (R6 = C2-6 alkyne group, R7 = C1-10 alkyl group that may also have ether bonding, or IV, m = 0 or 1), or alkylene or oxydialkylene group connected to R5. The electrolyte solns. may also contain phosphate esters.
 AN 2001:564135 CAPLUS

L12 ANSWER 14 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 DN 135:125035
 TI Fire-resistant electrolyte solutions and secondary nonaqueous electrolyte batteries
 IN Yamada, Manabu; Kubota, Naohiro
 PA Denso Co., Ltd., Japan; Asahi Denka Kogyo K. K.
 SO Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF
 DT Patent
 IA Japanese
 PAN.CNT 1
 PATENT NO. KIND DATE APPLICATION NO. DATE
 PI JP 2001210365 A2 20010803 JP 2000-22245 20000131
 PRAI JP 2000-22245 20000131
 OS MARPAT 135:125035

L12 ANSWER 15 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN
 IT 98254-32-1
 RL: CAT (Catalyst use); NUU (Other use, unclassified); USES (Uses)
 (cellulose fiber treated with; method of making carboxylated cellulose fibers and products for papermaking)
 RN 98254-32-1 CAPLUS
 CN 1,5-Dioxa-9-azapiro[5.5]undec-9-yloxy, 3,3,8,8,10,10-hexamethyl- (9CI) (CA INDEX NAME)



AB A method of making highly carboxylated cellulose fibers whose fiber strength and d.p. is not significantly sacrificed comprises (1) oxidizing the cellulose fiber (kraft pulp) with a cyclic nitroxide free radical compound as a primary oxidant and a hypohalite salt as a secondary oxidant under aqueous alkaline conditions; and (2) treating the oxidized cellulose against d.p. loss in aqueous suspension with a stabilizing agent selected from the

group consisting of reducing agent and tertiary oxidizing agent. The product is especially useful as a papermaking fiber where it contributes strength and has a higher attraction for cationic additives, and it is also useful as an additive to recycled fiber to increase strength.

AN 2001:300943 CAPLUS
 DN 134:312682
 TI Method of making carboxylated cellulose fibers and products
 IN Jewell, Richard A.; Komen, Joseph Lincoln; Su, Bing; Weerawarna, S.
 Ananda; Li, Yong
 PA Weyerhaeuser Company, USA
 SO PCT Int. Appl., 52 pp.
 CODEN: PIXXD2

DT Patent
 IA English
 PAN.CNT 3
 PATENT NO. KIND DATE APPLICATION NO. DATE

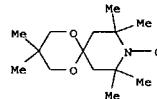
PI WO 2001029309 A1 20010426 WO 2000-US27837 20001006
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BY, BZ, CA, CH, CN,
 CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GR, GD, GB, GH, GM, HR,
 HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, XE, LC, LK, LR, LS, LT,
 LU, LV, MN, MD, MG, MK, MW, MY, MZ, NO, NZ, PL, PT, RO, RU,
 SD, SE, SG, SI, SK, SL, TH, TR, TT, TZ, UA, UG, UZ, VN, YU,
 ZA, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM,
 RW: GH, GM, KE, LS, MW, MZ, SD, SE, SZ, TZ, UG, ZN, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
 CF, CG, CI, CM, GA, GN, GH, ML, MR, NE, SN, TD, TG
 US 6379459 B1 20000430 US 1999-418909 19991015
 EP 1238142 A1 20020911 EP 2000-970682 20001006
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL
 JP 2003512540 T2 20030402 JP 2001-532283 20001006

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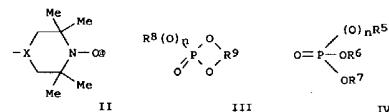
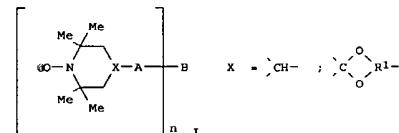
7/6/04

L12 ANSWER 15 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 PRAI US 1999-418909 A 19991015
 US 1999-272137 A2 19990319
 WO 2000-US27837 W 20001006
 OS MARPAT 134:312682
 RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 16 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN
 IT 98254-32-1
 RL: DEV (Device component use); USES (Uses)
 (electrolyte solvent mixts. containing N-oxy-2,2,6,6-tetramethyl-4-piperidine derivs. and phosphorus compds. for secondary lithium batteries)
 RN 98254-32-1 CAPLUS
 CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3,8,8,10,10-hexamethyl- (9CI) (CA INDEX NAME)



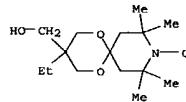
GI



AB The electrolyte solns. contain electrolyte salts and organic solvents, which includes N-oxy-2,2,6,6-tetramethyl-4-piperidine, preferably I (n = 1-6, R1 = trivalent C2-10 alkane radical, A = -O-, -NR2- or a single bond, R2 =

L12 ANSWER 16 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 Cl-10 alkyl group, B = H or Cl-10 alkyl group which may have ether bonding, n valent acyl or carbamoyl group, or -COO-(R3COO)R4, R3 = C2-6 alkylene group, R4 = Cl-10 alkyl group or III). The electrolyte salt is selected from LiPF6, LiBF4, LiClO4, CF3SO2Li, (CF3SO2)2Li, (CF3SO2)3Li, and the solvent may also contain III or IV (R5-8 = linear or branched C1-4 (fluorinated) alkyl group, R9 = linear or branched C2-8 alkylene group, n = 0 or 1).
 AN 2000-600579 CAPLUS
 DN 133-196004
 TI Fire-resistant electrolyte solutions and secondary nonaqueous electrolyte batteries
 IN Kubota, Naohiro; Takeuchi, Yasunori
 PA Asahi Denka Kogyo K. K., Japan
 SO Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAP
 DT Patent
 LA Japanese
 PAP.CNT 1
 PATENT NO. KIND DATE APPLICATION NO. DATE
 PI JP 2000235867 A2 20000829 JP 1999-36258 19990215
 PRAI JP 1999-36258 19990215
 OS MARPAT 133:196004

L12 ANSWER 17 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN
 IT 98238-34-5
 RL: TMR (Technical or engineered material use); USES (Uses)
 (optical recording material compns. containing piperidine-type light stabilizers and recording media thereof)
 RN 98238-24-5 CAPLUS
 CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3-ethyl-3-(hydroxymethyl)-8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)

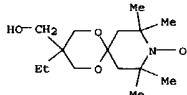


AB The compns. contain optical recording colorants such as indolenin-type group as light stabilizers, and optionally quenchers. The recording media with thin-film recording layers of the compns. exhibit excellent light stability.
 AN 2000-408705 CAPLUS
 DN 133-51290
 TI Optical recording material compositions and recording media thereof
 IN Hamada, Rieko; Tomita, Atsuo; Yano, Toru; Negishi, Yoshinori
 PA Asahi Denka Kogyo K. K., Japan
 SO Jpn. Kokai Tokkyo Koho, 14 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 PAP.CNT 1
 PATENT NO. KIND DATE APPLICATION NO. DATE
 PI JP 2000169233 A2 20000620 JP 1998-346021 19981204
 PRAI JP 1998-346021 19981204
 OS MARPAT 133.51290

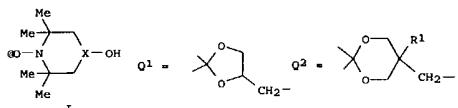
09/844986

7/6/04

L12 ANSWER 18 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN
IT 98238-24-5
RL: MOA (Modifier or additive use); USES (Uses)
(thermosetting polymeric coating compns. containing nitroso hindered
amines
with improved light resistance)
RN 98238-24-5 CAPLUS
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3-ethyl-3-(hydroxymethyl)-
8,8,10,10-tetramethyl- (9CI) (CA INDEX NAME)



GI



AB The compns., useful for coatings for automobile exteriors, contain hindered amines I (X = CH, Q1, Q2; R1 = C1-18 alkyl). Thus, a primer-treated steel sheet was successively spray-coated with (A) an acrylic base coating and (B) a Bu acrylate-2-hydroxyethyl methacrylate-methacrylic acid-Me methacrylate copolymer-based top coating containing 0.5 part I (X = CH) and baked to give a test piece with improved

light resistance.

AN 1999-663315 CAPLUS

DN 131:300640

TI Thermosetting polymeric coating compositions containing nitroso hindered amines

IN Yamakawa, Kazumi; Negishi, Yoshinori

PA Aichi Denka Kogyo K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

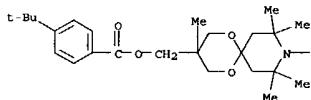
LA Japanese

PAN.CNT 1

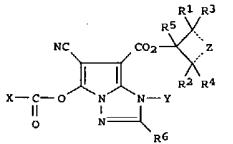
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11286634	A2	19991019	JP 1998-88461	19980401

L12 ANSWER 19 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN

IT 200216-49-5
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(photog. material containing pyrrolotriazole coupler and amines to reduce yellow and cyan stains)
RN 200216-49-5 CAPLUS
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3-[[[4-(1,1-dimethylethyl)benzoyl]oxy]methyl]-3,8,8,10,10-pentamethyl- (9CI) (CA INDEX NAME)



GI



AB Claimed photog. material has a layer containing (1) a pyrrolotriazole coupler

I (R1-5 = H, substituent; Z = non-metal ring; X = heterocyclic group, amino, aryl; R6 = substituent; Y = H, substituent) and (2) a compound Ra1LNRa2Ra3, where Ra1, Ra2, and Ra3 are alkyl, alkenyl, aryl, heterocyclic group, L = arylene or single bond; Ra1 and L, Ra2 and L, Ra3 and L, Ra1 and Ra2, Ra2 and Ra3, Ra1 and Ra3 may be combined to form 5-7-membered ring; Ra3 may also be H. It has good color reproduction quality, good dye stability and provides an image with low cyan and yellow dye stains. Thus, in a multilayer color paper, coupler I (R1-5 and Z = 2,6-di-tert-butyl-4-methylcyclohexyl; R6 = 4-tert-butylphenyl; Y = H; X = morpholine-4-yl and 1-methoxy-2,2,6,6-tetramethyl-4-tetradecoyl-piperidine were incorporated to provide the mentioned advantages.

AN 1997-716132 CAPLUS

DN 128-68433

TI Silver halide photographic material containing pyrrolotriazole coupler and

amine
IN Morikaki, Masakazu; Mikoshiba, Hisashi; Yoneyama, Hiroyuki
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 65 pp.

09/844986

L12 ANSWER 19 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
PR1 JP 1998-88461 19980401
OS MARPAT 131:300640

L12 ANSWER 19 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

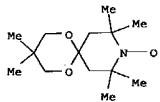
CODEN: JKXXAF
DT Patent
LA Japanese
PAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09288339	A2	19971104	JP 1996-126445	19960423
JP 1996-126445				19960423

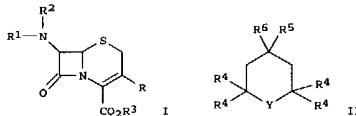
7/6/04

L12 ANSWER 20 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN

IT 98254-32-1
RL: CAT (Catalyst use); USES (Use)
(process for the preparation of 3-formylcephem derivs. from
3-(hydroxymethyl)cepheme)
RN 98254-32-1 CAPLUS
CN 1,5-Dioxa-9-azaspiro[5.5]undec-9-yloxy, 3,3,8,8,10,10-hexamethyl- (9CI)
(CA INDEX NAME)



GI



AB The present invention concerns a new process for the preparation of 3-formylcephem derivs. of general formula I, wherein R = CHO, R1 is H or an amino protecting group, R2 is H or an amino protecting group, R3 is a carboxylic acid protecting group, through oxidation of 3-(hydroxymethyl)cepheme derivs. I (R = CH2OH) with a inorg. hypohalogenite or halogenite in the presence of a compound of formula II, wherein R4 is the same or different lower alkyl groups, R5 and R6 are either both H or lower alkoxy or one is H and the other is OH, lower alkoxy, arylcarbonyloxy, or NHCO-lower-alkyl, or together are a ketal group. Thus, hydroxymethylcepheme I [R = CH2OH, R1 = MeCMe2OC(:O), R2 = H, R3 = CHPH2] was oxidized by NaOCl in CH2Cl2 containing TEMPO (II, R4 = Me, R5 = R6 = H, Y = NO) to give aldehyde I [R = CHO, R1 = MeCMe2OC(:O), R2 = H, R3 = CHPH2], KBr and NaHCO3.
AN 1996:94487 CAPLUS
DN 125:142458
TI Process for the preparation of 3-formylcephem derivatives
IN Lohri, Bruno; Vogt, Peter
PA F. Hoffmann-La Roche Ag, Switz.

L12 ANSWER 20 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

SO Eur. Pat. Appl., 11 pp.
CODEN: EPXXDW
DT Patent
LA German
PAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE
PI EP 722946 A1 19960724 EP 1995-120711 19951229
EP 722946 B1 19980819
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL
US 5631366 A 19970520 US 1995-573825 19951218
AT 169920 E 19980915 AT 1995-120711 19951229
ES 2121284 T3 19981116 ES 1995-120711 19951229
JP 08231555 A2 19960910 JP 1996-1085 19960109
JP 3073437 B2 20000807
CN 1134939 A 19961106 CN 1996-100857 19960110
CN 1060175 B 20010103
PRAI CH 1995-93 A 19950112
OS CASREACT 125:142458; MARPAT 125:142458